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# AMAZING STORIES

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# AMAZING STORIES

## THE MAGAZINE OF SCIENTIFICTION

HUGO GERNSBACK, *Editor*DR. T. O'CONNOR SLOANE, Ph.D.; *Associate Editor*WILBUR C. WHITEHEAD, *Literary Editor*C. A. BRANDT, *Literary Editor*

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*Extravagant Fiction Today - - - - - Cold Fact Tomorrow*

## INCREDIBLE FACTS

By HUGO GERNSBACK

**W**E are living in stirring times. To the individual with imagination it is easy to believe that we are really not living through the wonders we see, but rather, that we are living in a story book, and that the achievements about to be made will be imaginations.

Who, for instance, but an imaginative scientific writer, would think of making actual use of sunlight? Albrecht Yot two Swiss scientists, Dr. Kohler, and Dr. Demasse, who have been living in a hut for the last few months, on the summit of Mount Montan, at an altitude of 12,485 feet, have found that a certain group of stars sends out extraordinary rays of light, whose radio-active force is far stronger than that of X-rays. The scientists hope to capture and employ these rays for scientific and medical purposes.

Then, John Vanderhook, writing in the *New York Herald-Tribune*, reports on his recent scientific investigations in Dutch Guiana, that he found a certain tribe of Indians that use the so-called "snake root," well-known and accepted as the common truth by all Dutch scientists. Just today to this fantastic and incredible place of semi-fiction, which is fast becoming the witch-doctors take the head and tail of a rattlesnake, the most deadly one imaginable. They then cook this, together with some herbs, and, under a full moon, make it into a dark powder. Now comes the amazing thing. They take a man and make an incision in his vein, and into this incision pour the powder. From that time on the man so treated has the power of paralyzing a snake. When he encounters a snake, no matter how deadly it may be, it becomes completely powerless at his approach.

Scientists, in analyzing the medicines, have come within 30 per cent of finding the ingredients, but the rest is mystery. They believe that the powder causes a certain exhaustion in the perspiration of the person so treated, which has the power of paralyzing the snake. But this is simply a theory.

Then science comes along and finds the dimmest star we know of—a small satellite of the star Sirius. It is a star of about the same size as our earth, but weighs almost as much as our sun. That, of course, means nothing to the imagination, but translated, it means that if we should collect from this star, a little of its material the size of a baseball, the little ball would actually weigh over 14 tons, or approximately one ton per cubic inch. That's nothing, however.

Scientists now have a substance called "Neutronium," which we know exists in nature. This material weighs 20 million tons per cubic inch. It would take some 600 Woodworth Buildings, if placed in a scale, to balance one cubic inch of neutronium. Neutronium, is four trillion times as dense as water. It is composed of an electron and a proton, when the two coalesce with each other. It is the most in-

credible thing in the whole world. It is not affected chemically. It was not he says or felt, and there are no means of getting at it. This is, of course, on account of its extremely small size, so minute that if it falls, it will pass through every material on its way. It readily goes through glass walls, metal buildings, the earth itself, and continues falling right through the earth, passing through the center of it and going towards the other side, only to fall back. It keeps up this pendulum-like motion, its speed decreasing each time, until, finally, due to friction, it lodges at the center of the earth, where it comes to a stop.

Then there is the old mystery of Kaspar Hauser, who died in Germany in 1820 under circumstances so mysterious as his real identity. His case attracted much remarkable interest that in Germany alone more than 5,000 books have been written on the subject.

The story, in brief, is that one evening, in 1828, a Nuremberg astronomer noticed in the street a youth of about sixteen years, whose dazed appearance and peculiarity of gait reminded that of an idiot just learning to walk. The astronomer took him to the local barracks. Offered food, the boy refused meat and beer, with disgust, but eagerly ate and drank large quantities of bread and water. Kaspar Hauser was able to write his name, but he babbled like a baby. He could see very well in the dark, while bright light caused him acute discomfort, giving rise to inflammation of his eyelids. He was a metekyphobe, and was so intensely affected by metals that he had to have wooden spoons and forks with which to eat. The boy's sense of smell was so acute as his sight. He believed at the onset of a race, while the smell of meat made him violently sick. An attempt to give him anything to eat beyond bread and water made him ill. Even a few drops of wine or coffee mixed in a glass of water caused violent nausea.

After a while he became educated enough to relate his story, and it seems that he always lived in a black, low-ceilinged room, in which he was unable to stand upright. A black or dark man brought him bread and water every day, and he had a little wooden horse to play with. The dark man taught him to write, until he finally took him into a street, where the boy was abandoned. He lost his sensitivity to light and metals after a while, but the mystery surrounding him would not end, for two attacks were made on his life. The first attempt occurred, but when he was subdued in a public garden of the town, for the second time, he died three days later.

I have given these examples of incredible facts simply to show that we should not be too ready to denigrate the ideas that seem most impossible, for they have a trick of materializing even while we are talking about them.

# The RED DUST

By Murray Leinster

A Sequel to "The Mad Planet."



First raised his spear, and drove it down on the back of the moving thing, thrusting his spear with all the force he could command. He had fallen upon the shining back of one of the huge, interlocking blades, and his spear had slid across the heavy armor and then struck fast, having pierced only the ordinary tissue between the insect's head and thorax.

## CHAPTER I

## Proy

**T**HE sky grew gray and then almost white. The over-hanging banks of clouds seemed to withdraw a little from the steaming earth. Haze that hung always among the mushroom forests and above the fungus hills grew more tenuous, and the slow and misty rain that dripped the whole night long ceased reluctantly.

As far as the eye could see a mad world stretched out, a world of incoherent structures and strange, fierce maternal solitudes. The insects of the night—the great moths whose wings spread far and wide in the darkness, and the huge fireflies, four feet in length, whose beacons made the earth glow in their pale, weird light—the insects of the night had sought their hiding-places.

Now the creatures of the day ventured forth. A great ant-hill towered a hundred feet in the air. Upon its gravel and boulder-strewn side a commotion became visible.

The earth crumbled, and fell into an invisible opening, then a dark chasm appeared, and two slender, thrushlike antennae peered out.

A warrior ant emerged, and stood for an instant in the daylight, looking all about for signs of danger to the ant-city. He was all of ten inches long, his ant, and his mandibles were force and strong. A second and third warrior came from the inside of the ant-hill, and ran with tiny clickings about the hillock, waving their antennae restlessly, searching, ever searching for a menace to their city.

They returned to the gateway from which they had made their appearance, evidently bearing reassuring messages, because shortly after they had reentered the gateway of the ant-city, a flood of black, ill-smelling workers poured out of the opening and dispersed upon their business. The clickings of their limbs and an occasional whirling stridulation made an incessant sound as they scuttled over the earth, foraging among the mushrooms and giant cabbages, among the rubbish-heaps of the gigantic beehives and wasp colonies, and among the remains of the tragedies of the night for food for their city.

The city of the ants had begun its daily toil, toil in which every one shared without supervision or coercion. Deep in the recesses of the pyramid galleries were hollowed out and winding passages that led down a fathomless distance into the earth below.

Somewhere in the maze of tunnels there was a royal apartment, in which the queen-ant reposed, waited upon by countless courtiers, fed by royal stewards, and combed and rubbed by the hands of her subjects and children.

But even the huge monarch of the city had her constant and pressing duty of maternity. A dozen times the size of her largest loyal servant, she was

no less bound by the unwritten but imperative laws of the city than they. From the time of waking to the time of rest, she was ordained to be the queen-mother in the strictest and most literal sense of the word, for at intervals to be measured only in terms of minutes she brought forth a single egg, perhaps three inches in length, which was instantly seized by one of her eager attendants and carried in haste to the municipal nursery.

There it was placed in a tiny cell a foot or more in length until a sac-shaped grub appeared, all soft, white body save for a tiny mouth. Then the nurses took it in charge and fed it with curious, tender gestures until it had waxed large and fat and slept the sleep of metamorphosis. When it emerged from its rudimentary cocoon it took the place of its nurses until its soft skin had hardened into the horny armor of the workers and soldiers, and then it joined the throng of workers that poured out from the city at dawn to forage for food, to bring back its finds and to share with the warriors and the nurses, the drone males and the young queens, and all the other members of its communities, their duties in the city itself. That was the life of the social insect, absolute devotion to the cause of its city, utter abnegation of self-interest for the sake of its fellows—and death at their hands when their usefulness was past. They neither knew nor expected more or less.

It is a strange instinct that prompts these creatures to devote their lives to their city, taking no smallest thought for their individual good, without even the call of maternity or sex to guide them. Only the queen knows motherhood. The others know nothing but toil, for purposes they do not understand, and to an end of which they cannot dream.

At intervals all over the world of Rur's time these ant-cities rose above the surrounding ground, some small and barely begun, and others ancient colonies which were truly the continuation of cities first built when the ants were insects to be crushed beneath the feet of man. These ancient strongholds towered two, three, and even four hundred feet above the plains, and their inhabitants would have had to be numbered in millions if not billions.

Not all the earth was subject to the ants, however. Bees and wasps and more deadly creatures creased over and flew above its surface. The bees were four feet and more in length. And slender-waisted wasps darted here and there, preying upon the colossal crickets that sang deep base music to their mates—and the length of the crickets was the length of a man, and more.

Spiders with bleated bellies waited, motionless, in their anarcs, whose threads were the size of small cables, waiting for some luckless giant insect to be entangled in the gummy traps. And butterflies flattered over the fastering plains of this new world, tremendous creatures whose wings could only be measured in terms of yards.

**YOU who have read "The Red Dust" by Murray Leinster, will welcome the sequel to that story. The world, in a far distant future, is peopled with huge insects and their jungle growths. Life has been greatly altered, and they men is now in the process of becoming assimilated to the change. It's again men vs. ants, but this time a far greater danger threatens the human race. The huge insects are still in evidence, but the terror they inspire is as nothing compared to the deadly Red Dust. You will follow this remarkable story with breathless interest.**



An outcropping of rock jutted up abruptly from a fungus-covered plain. Shelf-fungi and strangely colored molds stained the stone until the shining quartz was hidden almost completely from view, but the whole glistened like tinted crystal from the dark wetness of the night. Little wisps of vapor curled away from the slopes as the moisture was taken up by the already moisture-laden air.

Seen from a distance, the outcropping of rock looked innocent and still, but a nearer view showed many things.

Here a hunting wasp had come upon a gray worm, and was methodically inserting its sting into each of the twelve segments of the faintly writhing creature. Presently the worm would be completely paralyzed, and would be carried to the burrow of the wasp, where an egg would be laid upon it, from which a tiny maggot would presently hatch. Then weeks of agony for the great gray worm, conscious, but unable to move, while the maggot fed upon its living flesh—

There the tiny spider, youngest of hatchlings, barely four inches across, stealthily stalked some other still tinier mite, the little, many-legged larva of the oil-beetle, known as the bee-house. The almost infinitely small bee-house was barely two inches long, and could easily hide in the thick fur of a great bumblebee.

This one small creature would never fulfill its destiny, however. The hatchling spider sprang—it was a comb of midgelets which was seen over. When the spider had grown and was feared as a huge, black-bellied tarantula, it would slay monster crickets with the same ease and the same implacable ferocity.

The outcropping of rock looked still and innocent. There was one point where it overhung, forming a shelf, beneath which the stone fell away in a sheer-drop. Many colored fungus growths covered the rock, making it a riot of tints and shades. But hanging from the rocklike projection of the stone there was a strange, drab-white object. It was in the shape of half a globe, perhaps six feet by six feet at its largest. A number of little semicircular doors were lined about its sides, like inverted arches, each closed by a blank wall. One of them would open, but only one.

The house was like the half of a pallid orange, fastened to the roof of rock. Thick cables stretched in every direction for yards upon yards, anchoring the habitation firmly, but the most striking of the things about the house—still and quiet and innocent, like all the rest of the rock outcropping—were the ghostly trophies fastened to the outer walls and hanging from long silken chains below.

Here was the hind leg of one of the smaller beetles. There was the wing-case of a dying creature. Here a small-shell, two feet in diameter, hanging at the end of an inch-thick cable. There a boulder that must have weighed thirty or forty pounds, dangling in similar fashion.

But fastened here and there, haphazard and irregularly, were other more repulsive remnants. The shrunken head-armor of a beetle, the fierce jaws of a cricket—the pitiful shreds of a hundred crea-

tures that had formed forgotten meals for the blasted insect within the house.

Comparatively small as was the nest of the clothe spider, it was decorated as no ogre's castle had ever been adorned—legs soaked dry of their contents, carapaces of heavy armor forever to be unused by any creature, a wing of this insect, the head of that. And dangling by the longest cord of all, with a silken cable wrapped carefully about it to keep the parts together, was the shrunken, shriveled, dried-up body of a long-dead man!

Outside, the nest was a place of gruesome relics. Within, it was a place of luxury and ease. A cushion of softest down filled all the bulging bottom of the hemisphere. A canopy of similarly luxurious texture interposed itself between the rocky roof and the dark, hideous body of the resting spider.

The eyes of the hairy creature glistened like diamonds, even in the darkness, but the leathern, attenuated legs were tucked under the round-bellied body, and the spider was at rest. It had fed.

It waited, motionless, without desire or aversion, without emotions or perplexities, in comfortable, placid, machine-like contentment until time should bring the call to feed again.

A fresh carcass had been added to the decorations of the nest only the night before. For many days the spider would repose in motionless splendor within the silken castle. When hunger came again, a nocturnal foray, a creature would be poisoned upon and slain, brought bodily to the nest, and feasted upon, its body fastened upon the exterior, and another half-sleeping, half-waking period of dreamful idleness within the cybernetic chamber-house would ensue.

Slowly and timidly, half a dozen pink-skinned creatures made their way through the mushroom forest that led to the outcropping of rock under which the clothe spider's nest was slung. They were men, degraded remnants of the once dominant race.

Burl was their leader, and was distinguished solely by two three-foot stumps of the feathery, golden antennae of a night-flying moth he had bound to his forehead. In his hand was a harpy, chitinous spear, taken from the body of an unknown flying creature killed by the flames of the burning purple hills.

Since Burl's return from his solitary—and involuntary—journey, he had been greatly revered by his tribe. Elthario it had been but a leaderless, formless group of people, creeping to the same hideous place at nightfall to share in the food of the fortunate, and shudder at the fate of those who might not appear.

Now Burl had walked boldly to them, bearing, upon his back the gray bulk of a labyrinth spider he had slain with his own hands, and clad in wonderful garments of a gorgeousness they envied and admired. They hung upon his words as he struggled to tell them of his adventures, and slowly and dimly they began to look to him for leadership. He was wonderful. For days they had listened breathlessly to the tale of his adventures, but when he demanded that they follow him in another and more perilous affair, they were appalled.

A peculiar strength of will had come to Burl. He had seen and done things that no man in the memory of his tribe had seen or done. He had stood by when the purple hills burned and formed a funeral pyre for the herds of army ants, and for uncounted thousands of flying creatures. He had caught a leaping tarantula upon the point of his spear, and had escaped from the web of a banded web-spider by oiling his body so that the sticky threads of the snare refused to hold him fast. He had attacked and killed a great gray labyrinth spider.

But most potent of all, he had returned and had been welcomed by Soga—Soga of the swift foot and slender limbs, whose smile roused strange emotions in Burl's breast.

It was the adoring gaze of Soga that had roused Burl to this last pitch of recklessness. Months before the cloth spider in the hemispherical silk castle of the gruesome decorations had killed and eaten one of the men of the tribe. Burl and the spider's victim had been together when the spider appeared, and the first faint gray light of morning barely silhouetted the shaggy, horrible creature as it leaped from ambush behind a sandstone toward the fear-stricken pair.

Its attenuated legs were outstretched, its mandibles gaped wide, and its jaws clashed horribly as it formed a black blotch in mid air against the lightning sky.

Burl had fled, screaming, when the other man was seized. Now, however, he was leading half a dozen trampling men toward the inverted dome in which the spider dazed. Two or three of them bore spears like Burl himself, but they bore them awkwardly and timorously. Burl himself was possessed by a strange, fictitious courage. It was the utter recklessness of youth, coupled with the eternal masculine desire to display prowess before a desired female.

The wavering advance came to a halt. Most of the naked men stopped from fear, but Burl stopped to invoke his newly discovered inner self, that had furnished him with such marvelous plans. Quite accidentally he had found that if he persistently asked himself a question, some sort of answer came from within.

Now he gazed up from a safe distance and asked himself how he and the others were to slay the cloth spider. The nest was some forty feet from the ground, on the undersurface of a shelf of rock. There was sheer open space beneath it, but it was firmly held to its support by long, silken cables that curled to the upper side of the rock-shelf, clinging to the stone.

Burl gazed, and presently an idea came to him. He beckoned to the others to follow him, and they did so, their knees knocking together for their fright. At the slightest alarm they would flee, screaming in fear, but Burl did not plan that there should be any alarm.

He led them to the rear of the singular rock formation, up the gently sloping side, and toward the precipitous edge. He drew near the point where the rock fell away. A long, tentacle-like silk cable curled up over the edge of a little promontory of stone that jotted out into nothingness.

Burl began to feel oddly cold, and something of the panic of the other men communicated itself to him. This was one of the anchoring cables that held the spider's castle secure. He looked and found others, six or seven in all, which performed the task of keeping the shaggy, horrid ogre's home from falling to the ground below.

His idea did not desert him, however, and he drew back, to whisper orders to his followers. They obeyed him solely because they were afraid, and he spoke in an authoritative tone, but they did obey, and brought a dozen heavy boulders of perhaps forty pounds weight each.

Burl grasped one of the silken cables at its end and turt it loose from the rock for a space of perhaps two yards. His flesh crawled as he did so, but something within him drove him on. Then, while bands of perspiration stood out on his forehead—induced by nothing less than cold, physical fear—he tied the boulder to the cable. The first one done, he felt emboldened, and made a second fast, and a third.

One of his men stood near the edge of the rock, listening in agonized apprehension. Burl had soon tied a heavy stone to each of the cables he saw, and as a matter of fact, there was but one of them he failed to notice. That one had been covered by the flicking mold that took the place of grass upon the rocky eminence.

There were left upon the promontory, several of the boulders for which there was no use, but Burl did not attempt to double the weights on the cables. He took his followers aside and explained his plan in whispers. Quaking, they agreed, and, trembling, they prepared to carry it out.

One of them stationed himself beside each of the boulders, Burl at the largest. He gave a signal, and half a dozen ripping, tearing sounds broke the sullen silence of the day. The boulders clashed and clattered down the rocky side of the precipice, tearing—perhaps "peeling"—the cables from their adhesion to the stone. They shot into open space and jerked violently at the half-globular nest, which was wrenched from its place by the combined impetus of the six heavy weights.

Burl had flung himself upon his face to watch what he was sure would be the death of the spider as it fell forty feet and more, imprisoned in its heavily weighted home. His eyes sparkled with triumph as he saw the ghastly, trophy-laden house swing out from the cliff. Then he gazed in terror.

One of the cables had not been discovered. That single cable held the spider's castle from a fall, though the nest had been torn from its anchorage, and now dangled heavily on its side in mid air. A convulsive struggle seemed to be going on within.

Then one of the archlike doors opened, and the spider emerged, evidently in terror, and confused by the light of day, but still venomous and still deadly. It found but a single of its anchoring cables intact, that leading to the cliff top hard by Burl's head.

The spider sprang for this single cable, and its legs grasped the slender thread eagerly while it began to climb rapidly up toward the cliff top.

As with all the creatures of Burl's time, its first

thought was of battle, not flight, and it came up the thin cord with its poison fangs unsheathed and its mandibles clacking in rage. The shaggy hair upon its body seemed to bristle with insane force, and the horrible, thin legs moved with desperate haste as it hastened to meet and wreak vengeance upon the cause of its sudden alarm.

Burl's followers fled, uttering shrieks of fear, and Burl started to his feet, in the grip of a terrible panic. Then his hand struck one of the heavy boulders. Exerting every ounce of his strength, he pushed it over the cliff just where the cable appeared above the edge. For the fraction of a second there was silence, and then the indescribable sound of an impact against a soft body.

There was a gasping cry, and a moment later the curiously muffled clatter of the boulder striking the earth below. Somehow, the sound suggested that the boulder had struck first upon some soft object.

A faint cry came from the bottom of the hill. The last of Burl's men was leaping to a hiding-place among the mushrooms of the forest, and had seen the sheen of shining armor just before him. He cried out and waited for death, but only a delicately formed wrap rose heavily into the air, bearing beneath it the more and more feebly struggling body of a giant cricket.

Burl had stood paralyzed, deprived of the power of movement, after casting the boulder over the cliff. That one action had taken the last ounce of his initiative, and if the spider had hauled itself over the rocky edge and dived toward him, slavering its thick spittle and uttering sounds of mad fury, Burl would not even have screamed as it calmed him. He was like a dead thing. But the oddly muffled sound of the boulder striking the ground below brought back hope of life and power of movement.

He peered over the cliff. The nest still dangled at the end of the single cable, still freighted with its gruesome trophies, but on the ground below a crushed and horribly writhing form was moving in convulsions of rage and agony.

Long, hairy legs worked desperately from a body that was no more than a mass of pulped flesh. A ferocious jaw tried to clump upon something—and there was no other jaw to meet it. An evil-smelling, sticky liquid exuded from the mangled writhing, thing upon the earth, moving in terrible contortions of torment.

Presently an ant drew near and extended insulative antennae at the helpless monster wounded to death. A shrill stridulation sounded out, and three or four other foot-long ants hastened up to wait patiently just outside the spider's reach until its struggles should have lessened enough to make possible the salvage of flesh from the perhaps still-living creature for the ant city a mile away.

And Burl, up on the cliff-top, danced and gesticulated in triumph. He had killed the elaks spider, which had slain one of the tribesmen four months before. Glory was his. All the tribesmen had seen the spider living. Now he would show them the spider dead. He stopped his dance of triumph and walked down the hill in haughty grandeur. He would reproach his timid followers for fleeing from the spider, leaving him to kill it alone.

Quite naively Burl assumed that it was his place to give orders and that of the others to obey. True, no one had attempted to give orders before, or to enforce their execution, but Burl had reached the eminently wholesome conclusion that he was a wonderful person whose wishes should be respected.

Burl, filled with fresh notions of his own importance, strutted on toward the hiding-place of the tribe, growing more and more angry with the other men for having deserted him. He would reproach them, would probably beat them. They would be afraid to protest, and in the future would undoubtedly be afraid to run away.

Burl was quite convinced that running away was something he could not tolerate in his followers. Obscurely—and conveniently in the extreme back of his mind—he reasoned that not only did a larger number of men present at a scene of peril increase the chances of coping with the danger, but they also increased the chances that the victim selected by the dangerous creature would be another than himself.

Burl's reasoning was unsophisticated, but sound; perhaps unconscious, but none the less effective. He grew quite furious with the deserters. They had run away! They had fled from a mere spider.

A shrill whine filled the air, and a ten-inch ant dashed at Burl with its mandibles extended threateningly. Burl's path had promised to interrupt the salvaging work of the insect, sugared in scraping shreds of flesh from the corpse of one of the smaller elaks slain the previous night. The ant dashed at Burl like an infuriated fire-eater, and Burl scurried away in undignified retreat. The ant might not be dangerous, but bites from its formic acid-poisoned mandibles were no trifles.

Burl came to the tangled thicket of mushrooms in which his tribe-folk hid. The entrance was tortuous and difficult to penetrate, and could be blocked on occasion with stones and tattered pulp. Burl made his way toward the central clearing, and heard as he went the sound of weeping, and the scolded chatter of the tribes people.

Those who had fled from the rocky cliff had returned with the news that Burl was dead, and Sago lay weeping beneath an over-shadowing toadstool. She was not yet the mate of Burl, but the time would come when all the tribe would recognize a status dimly different from the usual tribal relationship.

Burl stepped into the clearing, and straightway culled the first man he came upon, then the next and the next. There was a cry of astonishment, and the next second instinctive, fearful glances at that entrance to the hiding-place.

Had Burl fled from the spider, and was it following? Burl spoke loftily, saying that the spider was dead, that its legs, each one the length of a man, were still, and its fierce jaws and deadly poison-fangs harmless forevermore.

Ten minutes later he was leading an incredulous, awed little group of pink-skinned people to the spot below the cliff where the spider actually lay dead, with the ants busily at work upon its remains.

And when he went back to the hiding-place he donned again his great cloak that was made from the wing of a magnificent moth, slain by the flames

of the purple hills, and sat down in splendor upon a crumbling toadstool, to feast upon the glances of admiration and awe that were sent toward him. Only Saps held back shyly, until he motioned for her to draw near, when she seated herself at his feet and gazed up at him with unutterable adoration in her eyes.

But while Burl basked in the radiance of his tribe's admiration, danger was drawing near them all. For many months there had been strange red mushrooms growing slowly here and there all over the earth, they knew. The tribe-folk had speculated about them, but forbore tasting them because they were strange, and strange things were usually dangerous and often fatal.

Now these red growths had ripened and grown ready to emit their spores. Their rounded tops had grown fat, and the tough skin grew taut as if a strange pressure were being applied from within. And to-day, while Burl luxuriated in his position of feared and admired great man of his tribe, at a spot a long distance away, upon a hill-top, one of the red mushrooms burst. The spores inside the tent, tough skin shot all about as if scattered by an explosion, and made a little cloud of reddish, impalpable dust, which hung in the air and moved slowly with the sluggish breeze.

A bee dived into the thin red cloud of dust, lazily and heavily flying back toward the hive. But barely had she entered the tinted atmosphere when her movements became awkward and convulsive, effortful and scotched. She trembled and twisted in mid air in a peculiar fashion, then dropped to the earth, while her abdomen moved violently.

Bees, like almost all insects, breathe through spiracles on the undersurfaces of their abdomens. This bee had breathed in some of the red mushroom's spores. She thrashed about desperately upon the toadstool on which she had fallen, struggling for breath, for life.

After a long time she was still. The cloud of red mushroom spores had strangled or poisoned her. And everywhere the red fringes grew, such explosions were taking place, one by one, and wherever the red clouds hung in the air creatures were breathing them in and dying in convulsions of strangulation.

## CHAPTER II

### The Journey

**D**ARKNESS. The soft, blanketing night of the age of fungoids had fallen over all the earth, and there was blackness everywhere that was not good to have. Here and there, however, dim, bluish lights glowed near the ground. There an intermittent glow showed that a fire-fly had wandered far from the rivers and swamps above which most of his kind now congregated. Now a faintly luminous ball of fire drifted above the steaming, moisture-codden earth. It was a will-o'-the-wisp, grown to a yard in diameter.

From the low-hanging banks of clouds that hung perpetually overhead, large, warm raindrops fell ceaselessly. A drop, a pause, and then another drop,

added to the already dank moisture of the ground below.

The world of fungus growths flourished on just such dampness and humidity. It seemed as if the toadstools and mushrooms could be heard, swelling and growing large in the darkness. Rustlings and stealthy movements sounded furtively through the night, and from above the heavy thrab of mighty wing-beats was continuous.

The tribe was hidden in the midst of a tangled copse of toadstools too thickly interwoven for the larger insects to penetrate. Only the little midges hid in its recesses during the night-time, and the smaller moths during the day.

About and among the bases of the toadstools, however, where their spongy stalks rose from the humid earth, small beetles roamed, singing cheerfully to themselves in deep bass notes. They were small and round, some six or eight inches long, and their bodies were pale gray.

And as they went about they emitted sounds which would have been chirps had they been other than low as the lowest tone of a harp. They were truffle-beetles, in search of the dainty tidbits on which creatures once had feasted.

Some strange sense seemed to tell them when one of half a dozen varieties of truffle was beneath them, and they paused in their wandering to dig a tunnel straight down. A foot, two feet, or two yards, all was the same to them. In time they would come upon the morsel they sought and would remain at the bottom of their temporary home until it was consumed. Then another period of wandering, singing their cheerful song, until another likely spot was reached and another tunnel begun.

In a tiny, open space in the center of the toadstool thicket the tribe-folk slept with the deep notes of the truffle-beetles in their ears. A new danger had come to them, but they had passed it on to Burl with a new and childlike confidence and considered the matter settled. They slept, while beneath a glowing mushroom at one side of the clearing Burl struggled with his new problem. He squatted upon the ground in the dim radiance of the shining toadstool, his moth-wing cloak wrapped about him, his spear in his hand, and his twin golden plumes of the moth's antennae bared to his forehead. But his face was downcast as a child's.

The red mushrooms had begun to burst. Only that day, one of the women, seeking edible fungus for the tribal larder, had seen the fat, distended globe of the red mushroom. Its skin was stretched taut, and glistened in the light.

The women paid little or no attention to the red growth. Her ears were attuned to catch sounds that would warn her of danger while her eyes searched for tidbits that would make a meal for the tribe, and more particularly for her small son, left behind at the hiding-place.

A rippling noise made her start up, alert on the instant. The red envelope of the mushroom had split across the top, and a thick cloud of brownish-red dust was spouting in every direction. It formed a pyramidal cloud some thirty feet in height, which enlarged and grew thinner with minor eddies within itself.

A little yellow butterfly with wings barely a yard

from tip to tip, flapped busily above the mushroom-covered plain. Its wings beat the air with strokes that seemed like playful taps upon a friendly element. The butterfly was literally intoxicated with the sheer joy of living. It had emerged from its cocoon barely two hours before, and was making its maiden flight above the strange and wonderful world. It fluttered carelessly into the red-brown cloud of mushroom spores.

The woman was watching the slowly changing form of the spore-mist. She saw the butterfly enter the brownish dust, and then her gaze became greedy. There was something the matter with the butterfly. Its wings no longer moved busily and gently. They struck out in frenzied, hysterical blows that were erratic and wild. The little yellow creature no longer floated lightly and easily, but dashed here and there, wildly and without purpose, seeming to be in its death-throes.

It crashed helplessly against the ground and lay there, moving feebly. The woman hurried forward. The wings would be new fabric with which to adorn herself, and the fragile legs of the butterfly contained choice meat. She entered the dust-cloud.

A stream of intolerable fire—though the woman had never seen or known of fire—burned her nostrils and seared her lungs. She gasped in pain, and the agony was redoubled. Her eyes smarted as if burning from their sockets, and tears blinded her.

The woman instinctively turned about to flee, but before she had gone a dozen yards—blinded as she was—she stumbled and fell to the ground. She lay there, gasping, and uttering moans of pain, until one of the men of the tribe who had been engaged in foraging near by saw her and tried to find what had injured her.

She could not speak, and he was about to leave her and tell the other tribe-folk about her when he heard the clicking of an ant's limbs, and rather than have the ant pick her to pieces bit by bit—and leave his curiosity ungratified—the man put her across his shoulders and bore her back to the hiding-place of the tribe.

It was the tale the woman had told when she partly recovered that caused Burl to sit alone all that night beneath the shining toadstool in the little clearing, puzzling his just-awakened brain to know what to do.

The year before there had been no red mushrooms. They had appeared only recently, but Burl dimly remembered that one day, a long time before, there had been a strange breeze which blew for three day and nights, and that during the time of its blowing all the tribe had been sick and had wept continually.

Burl had not yet reached the point of mental development when he would associate that breeze with a storm at a distance, or reason that the spores of the red mushrooms had been borne upon the wind to the present resting-places of the deadly fungus growths. Still how could he decide that the breeze had not been deadly only because it was lightly laden with the fatal dust.

He knew simply that unknown red mushrooms had appeared, that they were everywhere about, and that they would hurt, and that to breathe the red

dust they gave out was grievous sickness or death.

The tribe slept while the bravely attired figure of Burl squatted under the glowing disk of the luminous mushroom, his face a picture of querulous perplexity, and his heart full of sadness.

He had consulted his strange inner self, and no plan had come to him. He knew the red mushrooms were all about. They would fill the air with their poison. He struggled with his problem while his people slumbered, and the woman who had breathed the mushroom-dust sobbed softly in her troubled sleep.

Presently a figure stirred on the farther side of the clearing. Saya woke and raised her head. She saw Burl crouching by the shining toadstool, his gay attire drooping and unnoticed. She watched him for a little, and the desolation of his pose awoke her pity.

She rose and went to his side, taking his hand between her two, while she spoke his name softly. When he turned and looked at her, confusion awoke her, but the misery in his face brought confidence again.

Burl's sorrow was heartbreakingly—he could not explain this new responsibility for his people that had come to him—but he was comforted by her presence, and she sat down beside him. After a long time she slept, with her head resting against his side, but he continued to question himself, continued to demand an escape for his people from the suffering and danger he saw ahead. With the day an answer came.

When Burl had been carried down the river on his fungus raft, and had landed in the country of the army ants, he had seen great forests of edible mushrooms, and had said to himself that he would bring Saya to that place. He remembered, now, that the red mushrooms were there also, but the idea of a journey remained.

The hunting-ground of his tribe had been free of the red fungoids until recently. If he traveled far enough he would come to a place where there were still no red toadstools. Then came the decision. He would lead his tribe to a far country.

He spoke with stern authority when the tribesmen woke, talking in few words and in a loud voice, holding up his spear as he gave his orders.

The third, pink-skinned people obeyed him meekly. They had seen the body of the clothe spider he had slain, and he had thrown down before them the gray bulk of the labyrinth spider he had thrust through with his spear. Now he was to take them through unknown dangers to an unknown haven, but they feared to disobey him.

They made light loads of their mushrooms and such meat-stuffs as they had, and parceled out what little fabric they still possessed. Three men bore spears, in addition to Burl's long shaft, and he had persuaded the other three to carry clubs, showing them how the weapon should be wielded.

The indefinitely brighter spot in the cloud-banks above that meant the shining sun had barely gone a quarter of the way across the sky when the trembling band of timid creatures made their way from their hiding-place and set out upon their journey. For their course, Burl depended entirely upon chance. He avoided the direction of the river,

however, and the path along which he had returned to his people. He knew the red mushrooms grew there. Purely by accident he set his march toward the west, and walked cautiously on, his tribes-folk following him fearfully.

Burl walked ahead, his spear held ready. He made a figure at once brave and pathetic, venturing forth in a world of monstrous ferocity and incredible malignance, armed only with a horny spear borrowed from a dead insect. His velvety cloak, made from a moth's wing, hung about his figure in graceful folds, however, and twin golden plumes nodded jauntily from his forehead.

Behind him the nearly naked people followed reluctantly. Here a woman with a baby in her arms, there children of nine or ten, unable to resist the instinct to play even in the presence of the manifold dangers of the march. They ate hungrily of the lumps of mushroom they had been ordered to carry. Then a long-legged boy, his eyes roving anxiously about in search of danger followed.

Thirty thousand years of flight from every peril had deeply submerged the combative nature of humanity. After the boy came two men, one with a short spear, and the other with a club, each with a huge mass of edible mushroom under his free arm, and both badly frightened at the idea of fleeing from dangers they knew and feared to dangers they did not know and consequently feared much more.

So was the caravan spread out. It made its way across the country with many deviations from a fixed line, and with many halts and pauses. Once a shrill shriek-like note filled all the air before them, a monster sound compounded of innumerable clidings and high-pitched cries.

They came to the tip of an eminence and saw a great space of ground covered with tiny black bodies locked in combat. For quite half a mile in either direction the earth was black with ants, snapping and biting at each other, locked in vice-like embraces, each combatant couple trampled under the feet of the contending armies, with no thought of surrender or quarter.

The sound of the clashing of fangs jaws upon horny armor, the cries of the maddened, and strange sounds made by the dying, and above all, the whining battle-cry of each of the fighting herds, made a sustained uproar that was almost deafening.

From either side of the battle-ground a pathway led back to separate ant-cities, a pathway marked by the hurrying groups of reinforcements rushing to the fight. Tiny as the ants were, for once no lumbering beetle swarmed innocently in their path, nor did the hunting-spiders mark them out for prey. Only little creatures smaller than the combatants themselves made use of the insect war for purposes of their own.

These were little gray ants barely more than four inches long, who scurried about in and among the fighting creatures with marvelous dexterity, carrying off, piece-meal, the bodies of the dead, and slaying the wounded for the same fate.

They hung about the edges of the battle, and invaded the abandoned areas when the tide of battle shifted, insect guerrillas, fighting for their own ends, careless of the origin of the quarrel, espous-

ing no cause, simply salvaging the dead and living debris of the combat.

Burl and his little group of followers had to make a wide detour to avoid the battle itself, and the passage between bodies of reinforcements hurrying to the scene of strife was a matter of some difficulty. The ants running rapidly toward the battle-field were hugely excited. Their antennae waved wildly, and the infrequent wounded one, limping back toward the city, was instantly and repeatedly challenged by the advancing insects.

They crossed their antennae upon his, and required thorough evidence that he was of the proper city before allowing him to proceed. Once they arrived at the battle-field they flung themselves into the fray, becoming lost and indistinguishable in the tide of straining, fighting black bodies.

Men in such a battle, without distinguishing marks or battle-cries, would have fought among themselves as often as against their foes, but the ants had a much simpler method of identification. Each ant-city possesses its individual odor—a variant on the scent of ferrous acid—and each individual of that city is recognized in his world quite simply and surely by the way he smells.

The little tribe of human beings paced precariously behind a group of a hundred excited insect warriors, and before the following group of forty equally excited black insects. Burl hurried on with his following, putting many miles of perilous territory behind before daylight. Many times during the day they saw the sudden billowing of a red-brown dust-cloud from the earth, and more than once they came upon the empty skin and drooping stalk of one of the red mushrooms, and more often still they came upon the mushrooms themselves, grown fat and taut, prepared to send their deadly spores into the air when the pressure from within became more than the leathery skin could stand.

That night the tribe hid among the bases of giant puff-balls, which at a touch shot out a puff of white powder resembling smoke. The powder was precisely the same in nature as that cast out by the red mushrooms, but its effects were marvelously—and mercifully—different; it was innocuous.

Burl slept soundly this night, having been two days and a night without rest, but the remainder of his tribe, and even Sage, were fearful and afraid, listening ceaselessly all through the dark hours for the menacing sounds of creatures coming to prey upon them.

And so for a week the march kept on. Burl would not allow his tribe to stop to forage for food. The red mushrooms were all about. Once one of the little children was caught in a whirling eddy of red dust, and its mother rushed into the deadly stuff to seize it and bring it out. Then the tribe had to hide for three days while the two of them recovered from the debilitating poison.

Once, too, they found a half-acre patch of the giant cabbage—there were six of them full grown, and a dozen or more smaller ones—and Burl took two men and speared two of the huge, twelve-foot slugs that fed upon the leaves. When the tribe passed on it was gorged on the fat meat of the slugs,

and there was much soft fur, so that all the tribe-folk wore loin-cloths of the yellow stuff.

There were perils, too, in the journey. On the fourth day of the tribe's traveling, Buri froze suddenly into stiffness. One of the hairy tarantulas—a trap-door spider with a black belly—had fallen upon a scorching beetle, and was devouring it only a hundred yards ahead.

The tribe-folk, trembling, went back for half a mile or more in panic-stricken silence, and refused to advance until he had led them a detour of two or three miles to one side of the dangerous spot.

Long, fear-ridden marches through perilous countries unknown to them, through the golden aisles of yellow mushroom forests, over the sliding surfaces of plains covered with many-colored "ruds" and molds; pauses beside turbid pools whose waters were concealed by thick layers of green slime, and other evil-smelling ponds which foamed and bubbled slowly, which were covered with puffy fungi that rose in strange forms of discolored foam.

Fleeting glimpses they had of the glimmering spokes of symmetrical spiders' webs, whose least thread it would have been beyond the power of the strongest of the tribe to break. They passed through a forest of puff-balls, which beamed when touched and shot a puff of vapor from their open mouths.

Once they saw a long and sinuous insect that fed before them and disappeared into a burrow in the ground, running with incredible speed upon legs of uncountable number. It was a centipede all of thirty feet in length, and when they crossed the path it had followed a horrible stench came to their nostrils so that they hurried on.

Long escape from unguessed dangers brought boldness, of a sort, to the pink-skinned men, and they would have rested. They went to Buri with their complaint, and he simply pointed with his hands behind them. There were three little clouds of brownish vapor in the air, where they could see, along the road they had traversed. To the right of them a dust-cloud was just settling, and to the left another rose as they looked.

A new trick of the deadly dust became apparent now. Toward the end of a day in which they had traveled a long distance, one of the little children ran a little to the left of the route the others were following. The earth had taken on a brownish hue, and the child stirred up the surface mould with its feet.

The brownish dust that had settled there was raised again, and the child ran, crying and choking, to its mother, its lungs burning as with fire, and its eyes like hot coals. Another day would pass before the child could walk.

In a strange country, knowing nothing of the dangers that might assail the tribe while waiting for the child to recover, Buri looked about for a hiding-place. Far over to the right a low cliff, perhaps twenty or thirty feet high, showed sides of crumbling, yellow clay, and from where Buri stood he could see the dark openings of burrows scattered here and there upon its face.

He watched for a time, to see if any bee or wasp inhabited them, knowing that many kinds of both insects dig burrows for their young, and do not occupy them themselves. No dark forms appeared,

however, and he led his people toward the openings.

The appearance of the holes confirmed his surmise. They had been dug months before by mining bees, and the entrances were "weathered" and worn. The tribe-folk made their way into the three-foot tunnels, and hid themselves, seizing the opportunity to gorge themselves upon the food they carried.

Buri stationed himself near the outer end of one of the little caves to watch for signs of danger. While waiting he poked curiously with his spear at a little pile of white and sticky parchment-like stuff he saw just within the mouth of the tunnel.

Instantly movement became visible. Fifty, sixty, or a hundred tiny creatures, no more than half an inch in length, tumbled pell-mell from the dirty-white heap. Awkward legs, tiny, greenish-black bodies, and bristles protruding in every direction made them strange to look upon.

They had tumbled from the whitish heap and now they made haste to hide themselves in it again, moving slowly and clumsily, with immense effort and laborious contortions of their bodies.

Buri had never seen any insect progress in such a slow and ineffective fashion before. He drew one little insect back with the point of his spear and examined it from a safe distance. Tiny jaws before the head met like twin sickles, and the whole body was shaped like a rounded diamond keelcase.

Buri knew that no insect of such small size could be dangerous, and leaned over, then took one creature in his hand. It wriggled frantically and slipped from his fingers, dropping upon the soft yellow caterpillar-fur he had about his middle. Instantly, as if it were a conjuring trick, the little insect vanished, and Buri searched for a matter of minutes before he found it hidden deep in the long, soft hairs of the fur, resting motionless, and evidently at ease.

It was a bee-louse, the first larval form of a beetle whose horny armor could be seen in fragments far yonder before the clayey cliff-side. Hidden in the openings of the bee's tunnel, it waited until the bee-grubs farther back in their separate cells should complete their changes of form and emerge into the open air, passing over the cluster of tiny creatures at the door-way. As the bees pass, the little bee-louse would clamber in eager haste up their hairy legs and come to rest in the fur about their thoraxes. Then, weeks later, when the bees in turn made other cells and stocked them with honey for the eggs they would lay, the tiny creatures would slip from their resting-places and be left behind in the fully provisioned cell, to eat not only the honey the bee had so laboriously acquired, but the very grub hatched from the bee's egg.

Buri had no difficulty in detaching the small insect and eating it away, but in doing so discovered three more that had hidden themselves in his furry garment, no doubt thinking it the seat of their natural, though unwilling hosts. He plucked them away, and discovered more, and more. His garment was the hiding-place for dozens of the creatures.

Disgusted and annoyed, he went out of the cavern and to a spot some distance away, where he took off his robe and pounded it with the flat side of his spear to dislodge the visitors. They dropped

out one by one, reluctantly, and finally the garment was clean of them. Then Burl heard a shout from the direction of the mining-bee caves, and hastened toward the sound.

It was then drawing toward the time of darkness, but one of the tribesmen had ventured out and found no less than three of the great imperial mushrooms. Of the three, one had been attacked by a parasitic purple mould, but the gorgeous yellow of the other two was undimmed, and the people were soon feasting upon the firm flesh.

Burl felt a little pang of jealousy, though he joined in the consumption of the find as readily as the others, and presently drew a little to one side.

He cast his eyes across the country, level and unbroken as far as the eye could see. The small clay cliff was the only inequality visible, and its height cut off all vision on one side. But the view toward the horizon was unobstructed on three sides, and here and there the black speck of a monster bee could be seen, drowsing homeward to its hive or burrow, and sometimes the slender form of a wasp passed overhead, its transparent wings invisible from the rapidity of their vibrations.

These flew high in the air, but lower down, barely skimming the tops of the many-colored mushrooms and toadstools, fluttering lightly above the swollen fungi, and touching their dainty proboscides to unpeckable things in default of the fragrant flowers that were normal food for their race—lower down flew the multitudes of butterflies the age of mushrooms had produced.

White and yellow and red and brown, pink and blue and purple and green, every shade and every color, every size and almost every shape, they flitted gaily in the air. There were some so tiny that they would barely have shaded Burl's face, and some beneath whose slender bodies he could have hiding himself. They flew in a riot of colors and thus above a world of foul mushroom growths, and turgid, slime-covered ponds.

Burl, temporarily out of the limelight because of the discovery of a store of food by another member of the tribe, bethought himself of an idea. Soon night would come on, the cloud-bank would turn red in the west, and then darkness would lean downward from the sky. With the coming of that time these creatures of the day would seek hiding-places, and the air would be given over to the furry moths that flew by night. He, Burl, would mark the spot where one of the larger creatures alighted, and would creep up upon it, with his spear held fast.

His wide blue eyes brightened at the thought, and he set himself down to watch. After a long time the soft, down-reaching fingers of the night touched the shaded slopes of the mushroom forests, and a gentle haze arose above the golden glades. One by one the gorgeous flares of the daytime slipped down and faded their painted wings. The overhanging clouds became darker—finally black, and the slow, deliberate rainfall that lasted all through the night began. Burl rose and crept away into the darkness, his spear held in readiness.

Through the black night, beneath deeper blackness which were the dark undersides of huge toadstools, creeping silently, with every sense alert

for sign of danger or for hope of giant prey, Burl made his slow advance.

A glorious butterfly of purple and yellow markings, whose wings spread out for three yards on either side of its delicately formed body, had hidden itself barely two hundred yards away. Burl could imagine it, now, pressing its slender limbs and combing from its long and slender proboscis any trace of the delectable foodstuffs on which it had fed during the day. Burl moved slowly and cautiously forward, all eyes and ears.

He heard an indescribable sound in a thicket a little to his left, and shifted his course. The sound was the faint whistling of air through the breath-holes along an insect's abdomen. Then came the delicate rustling of filmy wings being stretched and closed again, and the movement of sharply barbed feet upon the soft earth. Burl moved in breathless silence, holding his spear before him in readiness to plunge it into the gigantic butterfly's soft body.

The mushrooms here were grown thickly together, so there was no room for Burl's body to pass between their stalks, and the rounded heads were deformed and misshapen from their crowdings. Burl spent precious moments in trying to force a silent passage, but had to own himself beaten. Then he clambered up upon the spongy mass of mushroom heads, trusting to luck that they would sustain his weight.

The blackness was intense, so that even the forms of objects before him were lost in obscurity. He moved forward for some ten yards, however, walking gingerly over his precarious foothold. Then he felt rather than saw the opening before him. A body moved below him.

Burl raised his spear, and with a yell plunged down on the back of the moving thing, thrusting his spear with all the force he could command. He landed on a shifting form, but his yell of triumph turned to a scream of terror.

This was not the yielding body of a slender butterfly that he had come upon, nor had his spear penetrated the creature's soft flesh. He had fallen upon the shining back of one of the huge, meat-eating beetles, and his spear had slid across the horny armor, and then stuck fast, having pierced only the leathery tissue between the insect's head and thorax.

Burl's terror was pitiable at the realization, but as nothing to the ultimate panic which possessed him when the creature beneath him uttered a grunt of fright and pain, and, spreading its stiff wing-cases wide, shot upward in a crazy, panic-stricken, rocket-like flight toward the sky.

### CHAPTER III

#### The Saxton-Beebles

**B**URL fell head foremost upon the spongy top of a huge toadstool that split with the impact and let him through to the ground beneath, powdering him with its fine spores. He came to rest with his naked shoulder half-way through the yielding flesh of a mushroom-stalk, and



lay there for a second, catching his breath to scream again.

Then he heard the whining buzz of his attempted prey. There was something wrong with the beetle. Burl's spear had struck it in an awkward spot, and it was rocketing upward in erratic flight that ended in a crash two or three hundreds yards away.

Burl sprang up in an instant. Perhaps, despite his mistake, he had slain this infinitely more worthy victim. He rushed toward the spot where it had fallen.

His wide blue eyes pierced the darkness well enough to enable him to sheer off from masses of toadstools, but he could distinguish no details—nothing but forms. He heard the beetle floundering upon the ground; then heard it mount again into the air, more clumsily than before.

Its wing beats no longer kept up a sustained note. They thrashed the air irregularly and wildly. The flight was zigzag and uncertain, and though longer than the first had been, it ended similarly, in a heavy fall. Another period of floundering, and the beetle took to the air again just before Burl arrived at the spot.

It was obviously seriously hurt, and Burl forgot the dangers of the night in his absorption in the chase. He darted after his prey, feet-footed and agile, taking chances that in cold blood he would never have thought of.

Twice, in the pain-racked struggles of the monster beetle, he arrived at the spot where the gigantic insect flung itself about madly, insanely, fighting it knew not what, striking out with colossal wings and legs, dazed and drunk with agony. And each time it managed to get aloft in flight that was weaker and more purposeless.

Crazy, feeling from the torturing spear that pierced its very vitals, the beetle blundered here and there, floundering among the mushroom thickets in spasms that were constantly more prolonged and more agonized, but nevertheless flying heavily, lurching drunkenly, managing to graze the tops of the toadstools in one more despairing, tormented flight.

And Burl followed, aflame with the fire of the chase, arriving at the scene of each successive, panic-stricken struggle on the ground just after the beetle had taken flight again, but constantly more closely on the heels of the weakening monster.

At last he came up panting, and found the giant lying upon the earth, moving feebly, apparently unable to rise. How far he was from the tribe, Burl did not know, nor did the question occur to him at the moment. He waited for the beetle to be still, trembling with excitement and eagerness. The struggles of the huge form grew more feeble, and at last ceased. Burl moved forward and grasped his spear. He wrenched at it to thrust again.

In an instant the beetle had roused itself, and was exerting its last atom of strength, galvanized into action by the agony caused by Burl's seizure of the spear. A great wing-cover knocked Burl twenty feet, and flung him against the base of a mushroom, where he lay, half stunned. But then a strangely pungent scent came to his nostrils—the scent of the red mushrooms!

He staggered to his feet and fled, while behind him the gigantic beetle crashed and floundered—Burl heard a tearing and ripping sound. The insect had torn the covering of one of the red mushrooms, tightly packed with the fatal red dust. At the noise, Burl's speed was doubled, but he could still hear the frantic struggles of the dying beetle grow to a very crescendo of desperation.

The creature broke free and managed to rise in a final flight, fighting for breath and life, weakened and tortured by the spear and the horrible spores of the red mushrooms. Then it crashed suddenly to the earth and was still. The red dust had killed it.

In time to come, Burl might learn to use the red dust as poison gas had been used by his ancestors of thirty thousand years before, but now he was frightened and alone, lost from his tribe, and with no faintest notion of how to find them. He crouched beneath a huge toadstool and waited for dawn, listening with terrified apprehension for the ripping sound that would mean the bursting of another of the red mushrooms.

Only the wing beats of night-flying creatures came to his ears, however, and the discordant noises of the four-foot traffic-beetles as they roamed the aisles of the mushroom forests, seeking the places beneath which their instinct told them fungoid dainties awaited the courageous miner. The eternal dripping of the rain-drops falling at long intervals from the overhanging clouds formed a soft oblique to the whole.

Burl listened, knowing there were red toadstools all about, but not once during the whole of the long, dark hours did the rooding noise tell of a bursting fungus casting loose its freight of deadly dust upon the air. Only when day came again, and the chill dampness of the night was succeeded by the steaming humidity of the morning, did a tall pyramid of brownish-red stuff leap suddenly into the air from a ripped mushroom covering.

Then Burl stood up and looked around. Here and there, all over the whole countryside, slowly and at intervals, the cones of fatal red sprang into the air. Had Burl lived thirty thousand years earlier, he might have likened the effect to that of shells bursting from a leisurely bombardment, but as it was he saw in them only fresh and inexorable dangers added to an already peril-ridden existence.

A hundred yards from where he had hidden during the night the body of his victim lay, crumpled up and limp. Burl approached speedily. He had come even before the ants appeared to take their toll of the carcass, and not even a buzzing flesh-fly had placed its maggots on the unresisting form.

The long, whiplike antennae lay upon the carpet of mold and rust, and the closely toothed legs were drawn close against the body. The many-faceted eyes stared unseeing, and the stiff and horny wing-covers were rent and torn.

When Burl went to the other side of the dead beetle he saw something that filled him with elation. His spear had been held between his body and the beetle's during that mad flight, and at the final crash, when Burl shot away from the fear-crazed insect, the weight of his body had forced the spear-point between the joints of the corselet and the neck. Even if the red dust had not finished the

creature, the spear wound in time would have ended its life.

Burl was thrilled once more by his superlative greatness, and conveniently forgot that it was the red dust that had actually administered the coup de grace. It was so much more pleasant to look upon himself as the mighty slayer that he hacked off one of the hard-edged limbs to carry back to his tribe in evidence of his feat. He took the long antennae, too, as further proof.

Then he remembered that he did not know where his tribe was to be found. He had no faintest idea of the direction in which the beetle had flown. As a matter of fact, the course of the beetle had been in turn directed toward every point of the compass, and there was no possible way of telling the relation of its final landing-place to the point from which it had started.

Burl wrestled with his problem for an hour, and then gave up in disgust. He set off at random, with the leg of the huge insect hung over his shoulder and the long antennae clasped in his hand with his spear. He turned to look at his victim of the night before just before plunging into the near-by mushroom forest, and saw that it was already the center of a mass of tiny black bodies, pulling and hacking at the tough armor, and carving out great lumps of the succulent flesh to be carried to the near-by ant city.

In the teeming life of the insect world death is an opportunity for the survivors. There is a strangely tense and fearful competition for the bodies of the slain. There had been barely an hour of daylight in which the ants might seek for provender, yet in that little time the freshly killed beetle had been found and was being skillfully and carefully exploited. When the body of one of the larger insects fell to the ground, there was a mighty rush, a fierce race, among all the tribes of scavengers to see who should be first.

Usually the ants had come upon the scene and were inquisitively exploring the carcass long before even the flesh-flies had arrived, who dropped their living maggots upon the creature. The blue-bottles came still later, to dash their masses of white eggs about the delicate membranes of the eye.

And while all the preceding scavengers were at work, furtive beetles and tiny insects burrowed below the rotting body to attack the highly scented flesh from a fresh angle.

Each working independently of the others, they commonly appeared in the order of the delicacy of the source which could lead them to a source of food, though accident could and sometimes did afford one group of workers in pettiness an advantage over the others.

Thus, sometimes a blue-bottle anticipated even the eager ants, and again the very flesh-flies dropped their squirming offspring upon a limp form that was already being undermined by white-bellied things working in the darkness below the body.

Burl grimaced at the busy ants and buzzing flies, and disappeared into the mushroom forest. Here for a long time he moved cautiously and silently through the aisles of tangled stalks and the spongy, round heads of the fungoids. Now and then he saw one of the red toadstools, and made a wide detour

around it. Twice they burst within his sight, circumscribed as his vision was by the toadstools among which he was traveling.

Each time he ran hastily to put as much distance as possible between himself and the deadly red dust. He traveled for an hour or more, looking constantly for familiar landmarks that might guide him to his tribe. He knew that if he came upon any place he had seen while with his tribe he could follow the path they had traveled and in time rejoice there.

For many hours he went on, alert for signs of danger. He was quite ignorant of the fact that there were such things as points of the compass, and though he had a distinct notion that he was not moving in a straight line, he did not realize that he was actually moving in a colossal half-circle. After walking steadily for nearly four hours he was no more than three miles in a direct line from his starting-point. As it happened, his uncertainty of direction was fortunate.

The night before the tribe had been feeding happily upon one of the immense edible mushrooms, when they heard Burl's abruptly changing cry. It had begun as a shout of triumph, and ended as a scream of fear. Then they heard hurried wing-beats as a creature rose into the air in a scurry of desperation. The thrabbling of huge wings ended in a heavy fall, followed by another flight.

Velvety darkness masked the sky, and the tribesmen could only stare off into the blackness, where their leader had vanished, and begin to tremble, wondering what they should do in a strange country with no bold chieft to guide them.

He was the first man to whom the tribe had ever offered allegiance, but their submission had been all the more complete for that fact, and his loss was the more appalling.

Burl had mistaken their lack of timidity. He had thought it independence, and indifference to him. As a matter of fact, it was security because the tribe felt safe under his tutelage. Now that he had vanished, and in a fashion that seemed to mean his death, their old fears returned to them reinforced by the strangeness of their surroundings.

They huddled together and whispered their fright to one another, listening the while in panic-stricken apprehension for signs of danger. The tribesmen visualized Burl caught in fiercely toothed limbs, being rent and torn in mid air by hairy, insatiable jaws, his blood falling in great spurts toward the earth below. They caught a faint, ready cry, and shuddered, pressing closer together.

And so through the long night they waited in trembling silence. Had a hunting spider appeared among them they would not have lifted a hand to defend themselves, but would have fled despairingly, would probably have scattered and lost touch with one another, and spent the remainder of their lives as solitary fugitives, snatching fear-ridden rest in strange hiding-places.

But day came again, and they looked into each other's eyes, reading in each the selfsame panic and fear. Says was probably the most pitiful of all the group. Burl was to have been her mate, and her face was white and drawn beyond that of any of the rest of the tribesfolk.

With the day, they did not move, but remained

clustered about the huge mushrooms on which they had been feeding the night before. They spoke in hushed and fearful tones, huddled together, searching all the horizon for insect enemies. Says would not eat, but sat still, staring before her in unseeing indifference. Burl was dead.

A hundred yards from where they crouched a red mushroom glistened in the pale light of the new day. Its tough skin was taut and bulging, resisting the pressure of the spores within. But slowly, as the morning wore on, some of the moisture that had kept the skin soft and flaccid during the night evaporated.

The skin had a strong tendency to contract, like green leather when drying. The spores within it strove to expand. The opposing forces produced a tension that grew greater and greater as more and more of the moisture was absorbed by the air. At last the skin could hold no longer.

With a ripping sound that could be heard for hundreds of feet, the tough wrapping split and tore across its top, and with a hollow, booming noise the compressed mass of deadly spores rushed into the air, making a pyramidal cloud of brown-red dust some sixty feet in height.

The tribesmen cowered at the noise and faced the dust cloud for a fleeting instant, then ran pell-mell to escape the slowly moving tide of death as the almost imperceptible breeze wafted it slowly toward them. Men and women, boys and girls, they fled in a mad rush from the deadly stuff, not pausing to see that even as it advanced it settled slowly to the ground, nor stopping to observe its path that they might step aside and let it go safely by.

Says fled with the rest, but without their extreme panic. She fled because the others had done so, and ran more carelessly, struggling with a half-formed idea that it did not particularly matter whether she was caught or not.

She fell slightly behind the others, without being noticed. Then quite abruptly a stone turned under her feet, and she fell headlong, striking her head violently against a second stone. Then she lay quite still while the red cloud billowed slowly toward her, drifting gently in the faint, hardly perceptible breeze.

It drew nearer and nearer, settling slowly, but still a huge and menacing mass of deadly dust. It gradually flattened out, too, so that though it had been a rounded cone at first, it flowed over the minor inequalities of the ground as a huge and tenuous leech might have crawled, sucking from all breathing creatures the life they had within them.

A hundred and fifty yards away, a hundred yards away, then only fifty yards away. From where Says lay unconscious on the earth, eddies within the moving mass could be seen, and the edges took on a striated appearance, telling of the curling of the dust wreaths in the larger mass of deadly powder.

The delirious advance kept on, seeming almost purposeful. It would have seemed possible to draw from the unburied, menacing movement of the poisonous stuff that some malign intelligence was concealed in it, that it was, in fact, a living creature. But when the misty edges of the cloud were no more than twenty-five yards from Says's prostrate body a breeze from one side sprang up—a

vagrant, fufel little breeze, that first halted the red cloud and threw it into confusion and then drove it to one side, so that it passed Says without harming her, though a single trailing wisp of dark-red mist drifted very close to her.

Then for a time Says lay still indeed, only her breast rising and falling gently with faint and irregular breaths. Her head had struck a sharp-edged stone in her fall, and a tiny pool of sticky red had gathered from the wound.

Perhaps thirty feet from where she lay, three small toadstools grew in a little clump, their bases so close together that they seemed but one. From between two of them, however, just where their parted, twin tufts of reddish threads appeared, twinkling back and forth, and in and out. As if they had given some reassuring sign, two slender antennae followed, then bulging eyes, and then a small black body which had bright-red scalloped markings upon the wing-cases.

It was a tiny beetle no more than eight inches long—a burying-beetle. It drew near Says's body and clambered upon her, explored the ground by her side, moving all the time in feverish haste, and at last dived into the ground beneath her shoulder, coating back a little shower of hastily dug earth as it disappeared.

Ten minutes later another similar insect appeared, and upon the heels of the second a third. Each of them made the same busy examination, and each dived under the still form. Presently the earth seemed to billow at a spot along Says's side, then at another. Perhaps ten minutes after the arrival of the third beetle a little rampart had reared itself all about Says's body, precisely following the outline of her form. Then her body moved slightly, in a number of tiny jerks, and seemed to settle perhaps half an inch into the ground.

The burying beetles were of those who exploited the bodies of the fallen. Working from below, they excavated the earth from the under side of such prizes as they came upon, then turned upon their backs and thrust with their legs, jerking the body as it sank into the shallow excavation they had prepared.

The process would be repeated until at last the whole of the gift of fortune had sunk below the surrounding surface and the loosened earth fell in upon the top, thus completing the inhumation.

Then in the darkness the beetles would feast and rear their young, gorging upon the plentiful supply of succulent foodstuff they had hidden from jealous fellow scavengers above them.

But Says was alive. Thirty thousand years before, when scientists examined into the habits of the burying-beetles, or the sexton-beetles, they had declared that fresh meat or living meat would not be touched. They based their statement solely upon the fact that the insects (then tiny creatures indeed) did not appear until the trap-meat placed by the investigators had remained untouched for days.

Conditions had changed in thirty thousand years. The ever-present ants and the sharp-eyed flies were keen rivals of the brightly arrayed beetles. Usually the tribes of creatures who worked in the darkness below ground came after the ants had taken their toll, and the flies slipped daintily.

When Sayu fell unconscious upon the ground, however, it was the one accident that caused the burying-beetle to find her first, before the ants had come to tear the flesh from her slender, soft-skinned body. She breathed gently and irregularly, her face drawn with the sorrow of the night before, while desperately hurrying beetles swarmed beneath her body, channeling away the earth so that she would sink lower and lower into the ground.

An inch, and a long wait. Then she sank slowly a second inch. The brightest tufts of thread appeared again, and a beetle made his way to the open air. He thoved hastily about, inspecting the progress of the work. He dived below again. Another inch, and after a long time another inch was excavated.

Burl stepped out from a group of over-shadowing toadstools and halted. He cast his eyes over the landscape, and was struck by its familiarity. It was, in point of fact, very near the spot he had left the night before, in pursuit of a colossal wounded beetle.

Burl moved back and forth, trying to account for the sensation of recognition, and then trying to approximate the place from which he had last seen it.

He passed within fifty feet of the spot where Sayu lay, now half buried in the ground. The loose earth set up about her body had begun to fall in little rivulets upon her. One of her shoulders was already screened from view.

Burl passed on, unseeing. He was puzzling over the direction from which he had seen the particular section of countryside before him. Perhaps a little farther on he would come to the place. He hurried a little. In a moment he recognized his location. There was the great edible mushroom, half broken away, from which the tribe had been feeding. There were the mining bee burrows.

His feet stirred up a fine dust, and he stopped short. A red mushroom had covered the earth with a thin layer of its impalpable, deadly powder. Burl understood why the tribe had gone, and a cold sweat came upon his body. Was Sayu safe, or had the whole tribe succumbed to the poisonous stuff? Had they all, men and women and children, died in convulsions of gasping strangulation.

He hurried to retrace his footsteps. There was a fragment of mushrooms on the ground. Here was a spear, cast away by one of the tribesmen in his flight. Burl broke into a run.

The little excavation into which Sayu was sinking, inch by inch, was all of twenty-five feet to the right of the path. Burl dashed on, frantic with anxiety about the tribe, but most of all about Sayu. Sayu's body quivered and sank a fraction more into the earth.

Half a dozen little rivulets of dirt were tumbling upon her body now. In a matter of minutes she would be hidden from view. Burl ran madly past her, too busy searching the mushroom thickets before him with his eyes to dream of looking upon the ground.

Twenty yards from a huge toadstool thicket a noise arrested him sharply. There was a crashing and breaking of the brittle, spongy growths. Two tapering antennae appeared, and then a monster

beetle lurched into the open space, its horrible, gaping jaws stretched wide.

It was all of eight feet long, and its body was held up from the ground by six cracked, saw-toothed limbs. Its huge multiple eyes stared with machine-like preoccupation at the world.

It advanced deliberately, with a clanking and clashing as of a hideous machine. Burl fled on the instant, running as madly away from the beetle as he had a moment before been running toward it.

A little depression in the earth was before him. He did not swerve, but made to leap it. As he shot over it, however, the glint of pink skin caught his eye, and there was impressed upon his brain with photographic completeness the picture of Sayu, lying limp and helpless, sinking slowly into the ground, with tiny rills of earth falling down the sides of the excavation upon her. It seemed to Burl's eye that she quivered slightly as he saw.

There was a terrible straggle within Burl. Behind him the colossal meat-eating beetle. Beneath him Sayu, whom he loved. There was certain death lurking toward him on evilly glittering legs, and there was life for his race and tribe lying in the shallow pit.

He turned, aware with a sudden reckless glow that he was throwing away his life, aware that he was deliberately giving himself over to death, and stood on the side of the little pit nearest the great beetle, his puny spear held defiantly at the ready. In his left hand he held just such a leg as those which bore the living creature toward him. He had torn it from the body of just such a monster but a few hours ago, a monster in whose death he had had a share. With a yell of insane defiance, he flung the fiercely toothed limb at his advancing opponent.

The sharp tooth cut into the base of one of the beetle's antennae, and it ducked clumsily, then seized the missile in its fierce jaws and crushed it in frenzy of rage. There was meat within it, sweet and juicy meat that pleased the beetle's palate.

It forgot the man, standing there, waiting for death. It crunched the missile that had attacked it, eating the palatable contents of the horny armor, confounding the blow with the object that had delivered it, and evidently satisfied that an enemy had been conquered and was being devoured. A moment later it turned and lumbered off to investigate another mushroom thicket.

And Burl turned quickly and dragged Sayu's limp form from the grave that had been prepared for it by the busy insect scavengers. Earth fell from her shoulders, from her hair, and from the mass of yellow fur about her middle, and three little beetles with black and red markings scurried in terrified haste for cover, while Burl bore Sayu to a resting-place of soft mold.

Burl was an ignorant savage, and to him Sayu's deathlike unconsciousness was like death itself, but dumb misery smote him, and he laid her down gently, while tears came to his eyes and he called her name again and again in an agony of grief.

For an hour he sat there beside her, a man so lately pleased with himself above all creatures for having slain one huge beetle and put another to

flight, as he would have looked upon it, now a broken-hearted, little pink-skinned man, weeping like a child, hunched up and bowed over with sorrow.

Then Sayu slowly opened her eyes and stirred weakly.

## CHAPTER IV

### The Forest of Death

THEY were oblivious to everything but each other, Sayu resting in still half-incredulous happiness against Burl's shoulder while he told her in little, jerky sentences of his pursuit of the released flying beetle, of his search for the tribe, and then his discovery of her apparently lifeless body.

When he spoke of the monster that had lurched from the mushroom thicket, and of the desperation with which he had faced it, Sayu pressed close and looked at him with wondering and wonderful eyes. She could understand his willingness to die, believing her dead. A little while before she had felt the same indifference to life.

A timid, frightened whisper roused them from their absorption, and they looked up. One of the tribesmen stood upon one foot some distance away, staring at them, almost convinced that he looked upon the living dead. A sudden movement on the part of either of them would have sent him in a panic back into the mushroom forest. Two or three head nods bobbed and vanished among the tangled stalks. Wide and astonished eyes gazed at the two they had believed the prey of malignant creatures.

The tribe had come slowly back to the mushroom they had been eating, leaderless, and convinced that Sayu had fallen a victim to the deadly dust. Instead, they found her sitting by the side of their chief, apparently restored to them in some miraculous fashion.

Burl spoke, and the pink-skinned people came timorously from their hiding-places. They approached warily and formed a half-circle before the seated pair. Burl spoke again, and presently one of the bravest dared approach and touch him. Instantly a babble of the crude and belial language spoken by the tribe broke out. Awed questions and exclamations of thankfulness, then curious interrogations filled the air.

Burl, for once, showed some common sense. Instead of telling them in his usual vainglorious fashion of the adventures he had undergone, he merely crouched down the two long and tapering antennae from the flying beetle that he had torn from its dead body. They looked at them, and recognized their origin. Amusement and admiration showed upon their faces. Then Burl rose and abruptly ordered two of the men to make a chair of their hands for Sayu. She was weak from the effects of the blow she had received. The two men humbly advanced and did as they were bid.

Then the march was taken up again, more slowly than before, because of Sayu as a burden, but more the less steadily. Burl led his people across the country, marching in advance and with every nerve alert for signs of danger, but with more con-

fidence and less timidity than he had ever displayed before.

All that noon-time and that afternoon they filed steadily along, the tribesfolk keeping in a compact group close behind Burl. The man who had thrown away his spear had recovered it on an order from Burl, and the little party fairly bristled with weapons, though Burl knew well that they were liable to be cast away as impediments if flight should be necessary.

He was determined that his people should learn to fight the great creatures about them, instead of depending upon their legs for escape. He had led them in an attack upon great slugs, but they were defenseless creatures, incapable of more dangerous maneuvers than spasmodic jerkings of their great bodies.

The next time danger should threaten them, and especially if it came while their new awe of him held good, he was resolved to force them to join him in fighting it.

He had not long to wait for an opportunity to strengthen the spirit of his followers by a successful battle. The clouds toward the west were taking on a dulled hue, which was the nearest to a sunset that was ever seen in the world of Burl's experience, when a humble bee dived bowdly over their heads, making for its hive.

The little group of people on the ground looked up and saw a costly load of pollen packed in the stiff bristles of the insect's hind legs. The bees of the world had a hard time securing food upon the nearly flowerless planet, but this one had evidently made a find. Its crop was nearly filled with hard-gathered, viscous honey destined for the hive store.

It sped onward, heavily, its almost transparent wings more blurs in the air from the rapidity of their vibration. Burl saw its many-faceted eyes staring before it in worried preoccupation as it soared in laborious speed over his head, some fifty feet up.

He dropped his glance, and then his eyes lighted with excitement. A slender-bodied wasp was shooting upward from an ambush it had found in a thicket of toothstools. It darted swiftly and gracefully upon the bee, which swerved and tried to flee. The droning hum of the bee's wings rose to a higher note as it strove to increase its speed. The more delicately formed wasp headed the clumsy insect back.

The bee turned again and fed in terror. Each of the insects was slightly more than four feet in length, but the bee was much the heavier, and it could not attain the speed of which the wasp was capable.

The graceful form of the hunting insect rapidly overhauled its fleeing prey, and the wasp dashed in and dashed with the bee at a point almost over the heads of the tribesmen. In a clashing, biting tangle of thrashing, transparent wings and black bodies, the two creatures tumbled to the earth. They fell perhaps thirty yards from where Burl stood watching.

Over and over the two insects rolled, now one uppermost, and then the other. The bee was struggling desperately to insert her sting in the more supple body of her adversary. She writhed and

twisted, fighting with jaw and mandible, wing and claw.

The wasp was uppermost, and the bee lay on her back, fighting in panic-stricken desperation. The wasp saw an opening, her jaws darted in, and there was an instant of confusion. Then suddenly the bee, dazed, was upright with the wasp upon her. A movement too quick for the eye to follow—and the bee collapsed. The wasp had bitten her in the neck where all the nerve-cords passed, and the bee was dead.

Burl waited a moment more, aflame with excitement. He knew, as did all the tribesfolk, what might happen next. When he saw the second act of the tragedy well begun, Burl snapped quick and harsh orders to his spear-armed men, and they followed him in a wavering line, their weapons tightly clutched.

Knowing the habits of the insects as they were forced to know them, they knew that the venture was one of the least dangerous they could undertake with fighting creatures the size of the wasp, but the idea of attacking the great creatures whose sharp stings could annihilate any of them with a touch, the mere thought of taking the initiative was appalling. Had their awe of Burl been less complete they would not have dreamed of following him.

The second act of the tragedy had begun. The bee had been slain by the wasp, a voracious insect normally, but the wasp knew that sweet honey was concealed in the half-filled crop of the bee. Had the bee arrived safely at the hive, the sweet and sticky liquid would have been disgorged and added to the bival store. Now, though the bee's journey was ended and its flesh was to be crunched and devoured by the wasp, the honey was the first object of the pirate's solicitude.\* The dead insect was rolled over upon its back, and with eager haste the slayer began to exploit the body.

Burl and his men were creeping nearer, but with a gesture Burl bade them halt for a moment. The wasp's first move was to force the disgorgement of the honey from the bee's crop, and with feverish eagerness it pressed upon the limp body until the shining, sticky liquid appeared. Then the wasp began in ghastly ecstasy to lick up the sweet stuff, utterly absorbed in the feast.

Many thousands of years before, the absorption of the tiny insect had been noticed when engaged in a similar feat, and it was recorded in books molded into dust long ages before Burl's birth that its rapture was so great that it had been known to fall a victim to a second bandit while engaged in the horrible banquet.

Burl had never read the books, but he had been told that the pirate would continue its feast even though seized by a greater enemy, unable to tear itself from the nectar gathered by the creature it had slain.

The tribesmen waited until the wasp had begun its orgy, licking up the toothsome stuff disgorged by its dead prey. It ate in gluttonous haste, blind to all sights, deaf to all sounds, able to think of nothing, conceive of nothing, but the delights of the liquid it was devouring.

At a signal the tribesmen darted forward. They

wavered when near the slender-waisted gourmet, however, and Burl was the first to thrust his spear with all his strength into the thinly armored body.

Then the others took courage. A short, horny spear penetrated the very vitals of the wasp. A club fell with terrific impact upon the slender waist. There was a cracking, and the long, spidery limbs quivered and withered, while the tribesmen fell back in fear, but without cause.

Burl struck again, and the wasp fell into two withering halves, helpless for harm. The pink-skinned men danced in triumph, and the women and children ventured near, delighted.

Only Burl noticed that even as the wasp was dying, smothered and pierced with spears, its slender tongue licked out in one last, ecstatic taste of the nectar that had been its undoing.

Burdened with the pollen-covered legs of the giant bee, and filled with the meat from choice portions of the wasp's muscular limbs, the tribe resumed its journey. This time Burl had men behind him, still timid, still prone to flee at the slightest alarm, but infinitely more dependable than they had been before.

They had attacked and slain a wasp whose sting would have killed any of them. They had done battle under the leadership of Burl, whose spear had struck the first blow. Henceforth they were shavers, in a mild way, of his transcendent glory, and henceforth they were more like followers of a mighty chief and less like spineless workpayers of a drudge whose feats they were too timid to emulate.

That night they hid among a group of giant puff-balls, feasting on the loads of meat they had carried thus far with them. Burl watched them now without jealousy of their good spirits. He and Sage sat a little apart, happy to be near each other, speaking in low tones. After a time darkness fell, and the tribesfolk became shapeless bodies speaking in voices that grew drowsy and were silent. The black forms of the toadsted heads and huge puffballs were but darker against a dark sky.

The nightly rain began to fall, drop by drop, drop by drop, upon the damp and humid earth. Only Burl remained awake for a little while, and his last waking thought was of pride, disinterested pride. He had the first reward of the ruler, gratification in the greatness of his people.

The red mushrooms had continued to show their glistening heads, though Burl thought they were less numerous than in the territory from which the tribe had fled. All along the route, now to the right, now to the left, they had burst and sent their masses of deadly dust into the air.

Many times the tribesfolk had been forced to make a detour to avoid a slowly spreading cloud of death-dealing spores. Once or twice their escapes had been narrow indeed, but so far there had been no deaths.

Burl had observed that the mushrooms normally burst only in the daytime, and for a while had thought of leading his followers to do their journeying in the night. Only the obvious disadvantages of such a course—the difficulty of discovering food, and the prowling spiders that roamed in the darkness—had prevented him. The idea still stayed

\*This story is the *Pollinaria Arthropora*.

with him, however, and two days after the fight with the hunting wrap he put it in practice.

The trike came to the top of a small rise in the ground. For an hour they had been marching and counter-marching to avoid the suddenly appearing clouds of dust. Once they had been nearly hemmed in, and only by mad sprinting did they escape when three of the dull-red clouds seemed to flow together, closing three sides of a circle.

They came to the little hillock and halted. Before them stretched a plain all of four miles wide, colored a brownish brick-red by masses of mushrooms. They had seen mushroom forests before, and knew of the dangers they presented, but there was none so deadly as the plain before them. To right and left it stretched as far as the eye could see, but far away on its further edge Burl caught a glimpse of flowing water.

Over the plain itself a dull-red haze seemed to float. It was nothing more or less than a cloud of the deadly spores, dispersed and indefinite, constantly replenished by the freshly bursting red mushrooms.

While the people stood and watched a dozen thick columns of dust rose into the air from scattered points here and there upon the plain, settling slowly again, but leaving behind them enough of their finely divided substance to keep the thin red haze over the whole plain in its original, deadly state.

Burl had seen single red mushrooms before, and even small thickets of two and three, but here was a plain of millions, literally millions upon millions of the malignant growths. Here was one fungoid forest through whose aisles no monster beetles stalked, and above whose shadowed depths no brightly colored butterflies fluttered in joyous abandon. There were no loud-voiced crickets singing in its hiding-places, nor bodies of eagerly foraging ants searching ineffectively for bits of food. It was a forest of death, still and silent, quiet and motionless save for the sullen columns of red dust that ever and again shot upward from the torn and ragged envelope of the bursting mushrooms.

Burl and his people watched in wonderment and dismay, but presently a high resolve came to Burl. The mushrooms never burst at night, and the deadly dust from a subsided cloud was not deadly in the morning. As a matter of fact the rain that fell every night made it no more than a sudden, thin film of reddish mud by daybreak, mud which dried and craked.

Burl did not know what occurred, but knew the result. At night or in early morning, the danger from the red mushrooms was slight. Therefore he would lead his people through the very jaws of death that night. He would lead them through the deadly aisles of this, the forest of malignant growths, the place of lurking annihilation.

It was an act of desperation, and the resolution to carry it through left Burl in a state of mind that kept him from observing one thing that would have ended all the struggles of his tribe at once. Perhaps a quarter-mile from the edge of the red forest there or four giant cabbages grew, thrusting their colossal leaves upward toward the sky.

And on the cabbages a dozen large slugs fed leisurely, ignoring completely the red haze that was

never far from them and sometimes covered them. Burl saw them, but the oddity of their immunity from the effects of the red dust did not strike him. He was fighting to keep his resolution intact. If he had only realized the significance of what he saw, however—

The slugs were covered with a thick soft fur. The tribespeople wore garments of that same material. The fur protected the slugs, and could have made the tribe immune to the deadly red dust if they had only known. The slugs breathed through a row of tiny holes upon their backs, as the minute insects breathed through holes upon the bottom of their abdomens, and the soft fur formed a mat of felt which arrested the fine particles of deadly dust, while allowing the pure air to pass through. It formed, in effect, a natural gas-mask which the tribesmen should have adopted, but which they did not discover or invent.

The remainder of that day they waited in a curious mixture of resolve and fear. The tribe was rapidly reaching a point where it would follow Burl over a thousand-foot cliff, and it needed some such blind confidence to make them prepare to go through the forest of the million deadly mushrooms.

The waiting was a strain, but the actual journey was a nightmare. Burl knew that the toadstools did not burst of themselves during the night, but he knew that the beetle on which he had taken his involuntary ride had cracked against one in the darkness, and that the fatal dust had poured out. He warned his people to be cautious, and led them down the slope of the hill through the blackness.

For hours they stumbled on in utter darkness, with the pungent, acrid odor of the red growths constantly in their nostrils. They put out their hands and touched the sticky, damp stalks of the monstrous things. They stumbled and staggered against the leathery skins of the malignant fungi.

Death was all about them. At no time during all the dark hours of the night was there a moment when they could not reach out their hands and touch a fungus growth that might burst at their touch and fill the air with poisonous dust, so that all of them would die in gasping, choking agony.

And worst of all, before half an hour was past they had lost all sense of direction, so that they stumbled on blindly through the utter blackness, not knowing whether they were headed toward the river that might be their salvation or were wandering hopelessly deeper and deeper into the silent depths of the forest of strangled things.

When day came again and the mushrooms sent their columns of fatal dust into the air would they gasp and fight for breath in the red haze that would float like a tenebrous cloud above the forest? Would they breathe in flames of firelike torment and die slowly, or would the red dust be merciful and slay them quickly?

They felt their way like blind folk, devoid of hope and curiously unafraid. Only their hearts were like heavy, cold weights in their breasts, and they shouldered aside the swollen sacs of the red mushrooms with a singular apathy as they followed Burl slowly through the midst of death.

Many times in their journeying they knew that dead creatures were near by—moths, perhaps, that

had blundered into a distended growth which had burst upon the impact and killed the thing that had touched it.

No busy insect scavengers ventured into this plain of silence to salvage the bodies, however. The red haze preserved the sanctuaries of malignance inviolate. During the day no creature might hope to approach its red aisles and dust-carpeted clearings, and at night the slow-dropping rain fell only upon the rounded heads of the mushrooms.

In all the space of the forest, only the little band of hopeless people, pleading on behalf of Burl in the velvet blackness, callously rubbed shoulders with death in the form of the red and glistening mushrooms. Over all the dark expanse of the forest, the only sound was the dripping of the slow and sodden rainfall that began at nightfall and lasted until day came again.

The sky began to grow faintly gray as the sun rose behind the banks of overhanging clouds. Burl stopped short and uttered what was no more than a groan. He was in a little circular clearing, and the twisted, monstrous forms of the deadly mushrooms were all about. There was not yet enough light for colors to appear, and the hideous, almost obscene shapes of the leathsome growths on every side showed only as mocking, herring skeletons as of malicious demons rejoicing at the coming doom of the gray-faced, huddled tribesfolk.

Burl stood still, drooping in discouragement upon his spear, the feathery moth's antennae bound upon his forehead shadowed darkly against the gray sky. Soon the mushrooms would begin to burst—

Then, suddenly, he lifted his head, encouragement and delight upon his features. He had heard the ripple of running water. His followers looked at him with dawning hope. Without a word, Burl began to run, and they followed him more slowly. His voice came back to them in a shout of delight.

Then they, too, broke into a jostle. In a moment they had emerged from the thick tangle of brownish-red stalks and were upon the banks of a wide and swiftly running river, the same river whose gleam Burl had caught the day before from the farther side of the mushroom forest.

Once before Burl had floated down a river upon a mushroom raft. Then his journey had been involuntary and unlooked for. He had been carried far from his tribe and far from Sapa, and his heart had been filled with desolation.

Now he viewed the swiftly running current with eager delight. He cast his eyes up and down the bank. Here and there the river-bank rose in a low bluff, and thick shelf-growth stretched out above the water.

Burl was busy in an instant, stabbing the hard growths with his spear and striving to wrench them free. The tribesmen stared at him, uncomprehending, but at an order from him they did likewise.

Soon a downy thick mass of firm, light fungus lay upon the shore where it chafed gently into the water. Burl began to explain what they were to do, but one or two of the men dared remonstrate, saying humbly that they were afraid to part from him. If they might embark upon the same thing with him, they would be safe, but otherwise they were afraid.

Burl cast an apprehensive glance at the sky. Day was coming rapidly on. Soon the red mushrooms would begin to shoot their columns of deadly dust into the air. This was no time to pause and deliberate. Then Sapa spoke softly.

Burl listened, and made a mighty sacrifice. He took his gorgeous velvet cloak from his shoulders—it was made from the wing of a great moth—and tore it into a dozen long, irregular pieces, tearing it along the lines of the seams that reinforced it. He planted his spear upright in the largest piece of shelf-fungus and caused his followers to do likewise, then fastened the strips of sleeve and velvet to his spear-shaft, and ordered them to do the same to the other spears.

In a matter of minutes the dozen tiny rafts were bobbing on the water, clustered about the larger, central bit. Then, one by one, the tribesfolk took their places, and Burl shoved off.

The agglomeration of cranky, unworthy bits of shelf-fungus moved slowly out from the shore until the current caught it. Burl and Sapa sat upon the central bit, with the other trustful but somewhat frightened pink-skinned people all about them. And, as they began to move between the mushroom-lined banks of the river and the mist of the night began to lift from its surface, far in the interior of the forest of the red fungi a column of sulfur red leaped into the air. The dust of the malignant growths had cast its cargo of poisonous dust into the still-humid atmosphere.

The conical column spread out and grew thin, but even after it had sunk into the earth, a reddish tint remained in the air about the place where it had been. The deadly red haze that hung all through the day over the red forest was in process of formation.

But by that time the unstable fungus rafts were far down the river, bobbing and twirling in the current, with the wide-eyed people upon them gazing in wonderment at the shores as they glided by. The red mushrooms grew less numerous upon the banks. Other growths took their places. Molds and rusts covered the ground as grass had done in ages past. Mushrooms showed their crumby, rounded heads. Malformed things with swollen trunks and branches in strange mockery of the trees they had superseded made their appearance, and once the tribesmen saw the dark bulk of a haunting spider outlined for a moment upon the bank.

All the long day they rode upon the current, while the insect life that had been absent in the neighborhood of the forest of death made its appearance again. Bees once more droned overhead, and wasps and dragon-flies. Four-inch mosquitoes made their appearance, to be fought off by the tribesfolk with lusty blows, and glittering beetles and shining flies, whose bodies glittered with a metallic luster, buzzed and flew above the water.

Huge butterflies once more were seen, dancing above the steaming, foistering earth in an apparent ecstasy from the mere fact of existence, and all the thousand and one forms of insect life that flew and crawled, and swam and dived, showed themselves to the tribesmen on the raft.

Water-beetles came lazily to the surface, to snap with sudden energy at mosquitoes busily laying



their eggs in the nearly stagnant water by the river-banks. Burl pointed out to Sage, with some excitement, their silver breast-plates that shone as they darted under the water again. And the shell-covered backs of a thousand saddle-worms floated in the eddies and backwaters of the stream. Water-bots and whirligigs—almost alone among insects in not having shared in the general increase of size—danced upon the oily waves.

The day wore on as the shores flowed by. The tribesfolk ate of their burdens of mushroom and meat, and drank from the fresh water of the river. Then, when afternoon came, the character of the country about the stream changed. The banks fell away, and the current slackened. The shores became indefinite, and the river merged itself into a swamp, a vast swamp from which a continual muttering came which the tribesmen heard for a long time before they saw the swamp itself.

The water seemed to turn dark, as black mud took the place of the clay that had formed its bed, and slowly, here and there, then more frequently, floating green things that were stationary, and did not move with the current, appeared. They were the leaves of water-lilies, that had remained with the giant cabbages and a very few other plants in the midst of a fungoid world. The green leaves were twelve feet across, and any one of them would have floated the whole of Burl's tribe.

Presently they grew numerous so that the channel was made narrow, and the mushroom rafts passed between rows of the great leaves, with here and there a colossal, waxen blossom in which three men might have hidden and which exhaled an almost overpowering fragrance into the air.

And the muttering that had been heard far away grew in volume to an intermittent, incredibly deep bass roar. It seemed to come from the banks on either side, and actually was the discordant creaking of the giant frogs, grown to eight feet in length, which lived and leaped in the huge swamp, above which golden butterflies danced in ecstasy, and which the transcendently beautiful blossoms of the water-lilies filled with fragrance.

The swamp was a place of riotous life. The green bodies of the colossal frogs—perched upon the banks in strange immobility and only opening their huge mouths to emit their thunderous croakings—the green bodies of the frogs blended queerly with the vivid color of the water-lily leaves. Dragonflies flitted in their swift and angular flight above the black and reeking mud. Greenbottles and blue-bottles and a hundred other species of flies buzzed busily in the misty air, now and then falling prey to the licking tongues of the frogs.

Bees droned overhead in flight less preoccupied and worried than elsewhere flitting from blossom to blossom of the tremendous water-lilies, loading their crops with honey and the bristles of their legs with yellow pollen.

Everywhere over the mushroom-covered world the air was never quite free from mist, and the steaming exhalations of the peats, but here in the swamps the atmosphere was so heavily laden with moisture that the bodies of the tribesfolk were covered with glistening droplets, while the wide, flat water-lily leaves glittered like platters of

jewels from the "steam" that had condensed upon their upper surfaces.

The air was full of shining bodies and iridescent wings. Myriads of tiny midges—no more than three or four inches across their wings—danced above the slow-flowing water. And butterflies of every imaginable shade and color, from the most delicate lavender to the most vivid carmine, danced and fluttered, alighting upon the white water-lilies to sip daintily of their nectar, skimming the surface of the water, enamored of their brightly tinted reflections.

And the pink-skinned tribesfolk, floating through this fairyland on their mushroom rafts, gazed with wide eyes at the beauty about them, and drew in great breaths of the intoxicating fragrance of the great white flowers that floated like silk boats upon the dark water.

## CHAPTER V

### Out of Bondage

THE mist was heavy and thick, and through it the flying creatures darted upon their innumerable business, visibly for an instant in all their colorful beauty, then melting slowly into indefiniteness as they sped away. The tribesfolk on the shivered rafts watched them as they darted overhead, and for hours the little squadron of fungoid vessels floated slowly through the central channel of the marsh.

The river had split into innumerable currents which meandered purposelessly through the glistening black mud of the swamp, but after a long time they seemed to reassemble, and Burl could see what had caused the vast masses.

Hills appeared on either side of the stream, which grew higher and steeper, as if the foothills of a mountain chain. Then Burl turned and peered before him.

Rising straight from the low hills, a wall of high mountains rose toward the sky, and the low-hanging clouds met their rugged flanks but half-way toward the peaks. To right and left the mountains melted into the tenuous haze, but ahead they were firm and stalwart, rising and losing their heights in the cloud-banks.

They formed a rampart which might have guarded the edge of the world, and the river flowed more and more rapidly in a deeper and narrower current toward a cleft between two rugged giants that promised to swallow the water and all that might swim in its depths or float upon its surface.

Tall, steep hills rose from either side of the swift current, their sides covered with flaking mounds of an exotic shade of rose-pink, mingled here and there with lavender and purple. Rocks, not hidden beneath a coating of fungus, protruded their angular heads from the hillsides. The river valley became a gorge, and then little more than a cañon, with beetling sides that frowned down upon the swift current running beneath them.

The small stilts passed beneath an overhanging cliff, and then shot out to where the cliffsides drew apart and formed a deep amphitheater, whose top was hidden in the clouds.

And across this open space, on cables all of five hundred feet long, a handed spider had hung its web. It was a monster of its tribe. Its belly was swollen to a diameter of no less than two yards, and its outstretched legs would have touched eight points of a ten-yard circle.

It was hanging motionless in the center of the colossal snare as the little group of tribesfolk passed underneath, and they saw the broad bands of yellow and black and silver upon its abdomen. They shivered as their little crafts were swept below.

Then they came to a little valley, where yellow sand bordered the river and there was a level space of a hundred yards on either side before the steep sides of the mountains began their rise. Here the cluster of mushroom rafts were caught in a little eddy and drawn out of the swiftly flowing current. Soon there was a soft and yielding jar. The rafts had grounded.

Led by Burl, the tribesman waded ashore, wonderment and excitement in their hearts. Burl searched all about with his eyes. Toadstools and mushrooms, roots and molds, even giant puff-balls grew in the little valley, but of the deadly red mushrooms he saw none.

A single bee was humming slowly over the tangled thickets of fungoids, and the loud voice of a cricket came in a deafening burst of sound, echoed from the hillside, but save for the far-dung web of the handed spider a mile or more away, there was no sign of the deadly creatures that preyed upon man.

Burl began to climb the hillside with his tribesfolk after him. For an hour they toiled upward, through confused masses of fungus of almost every species. Twice they stopped to seize upon edible fungi and break them into masses they could carry, and once they paused and made a wide detour around a thicket from which there came a stealthy rustling.

Burl believed that the rustling was merely the sound of a moth or butterfly emerging from its chrysalis, but was unwilling to take any chances. He and his people circled the mushroom thicket and mounted higher.

And at last, perhaps six or seven hundred feet above the level of the river, they came upon a little plateau, going back into a small pocket in the mountainside. Here they found many of the edible fungoids, and no less than a dozen of the giant cabbages, on whose broad leaves many furry grubs were feeding steadily in placid contentment with themselves and all the world.

A small stream bubbled up from a tiny basin and ran swiftly across the plateau, and there were dense thickets of toadstools in which the tribesman might find secure hiding-places. The tribe would make itself a new home here.

That night they hid among intricately tangled masses of mushrooms, and saw with amazement the multitude of creatures that ventured forth in the darkness. All the valley and the plateau were illumined by the shining beacons of huge but graceful fire-flies, who darted here and there in delight and—apparently—in security.

Upon the earth below, also, many tiny lights glowed. The larvae of the fireflies crawled slowly but happily over the fungus-covered mountainside,

and great glow-worms clambered upon the shining tops of the toadstools and rested there, twin broad bands of bluish fire burning brightly within their translucent bodies.

They were the females of the firefly race, which never attach to legs and wings, but crawl always upon the earth, merely enlarged creatures in the forms of their own larvae. Moths soared overhead with mighty, throbbing wing-beats, and all the world seemed a paradise through which no evil creatures roamed in search of prey.

And a strange thing came to pass. Soon after darkness fell upon the earth and the steady drip-drop of the rain began, a musical tinkling sound was heard which grew in volume, and became a deep-toned roar, which reached and reverberated from the opposite hillside until it was like maddening and long-continued thunder. For a long time the people were puzzled and a little afraid, but Burl took courage and investigated.

He emerged from the concealing thicket and peered cautiously about, seeing nothing. Then he dared move in the direction of the sound, and the gleam from a dozen fireflies showed him a sheet of water pouring over a vertical cliff to the river far below.

The rainfall, gentle as it was, when gathered from all the broad expanse of the mountainside, made a river of its own, which had scooped out a bed, and poured down each night to plunge in a smother of spray and foam through six hundred feet of empty space to the swiftly flowing river in the center of the valley. It was this sound that had puzzled the tribesfolk, and this sound that lured them to sleep when Burl at last came back to allay their fears.

The next day they explored their new territory with a boldness of which they would not have been capable a month before. They found a single great trap-door in the earth, sure sign of the burrow of a monster spider, and Burl resolved that before many days the spider would be dealt with. He told his tribesmen so, and they nodded their heads solemnly instead of shrinking back in terror as they would have done not long since.

The tribe was rapidly becoming a group of men, capable of taking the aggressive. They needed Burl's rash leadership, and for many generations they would need bold leaders, but they were infinitely superior to the timid, rabbit-like creatures they had been. They bore spears, and they had used them. They had seen danger, and had blindly followed Burl through the forest of strangled things instead of fleeing weakly from the peril.

They were soft, yellow fur about their middles, taken from the bodies of giant slugs they had slain. They had eaten much meat, and preferred its succulent taste to the insipid savor of the mushrooms that had once been their steady diet. They knew the exhilaration of brave adventure—though they had been forced into adventure by Burl—and they were far more worthy descendants of their ancestors than those ancestors had known for many thousand years.

The exploration of their new domain yielded many wonders and a few adventures. The tribesfolk found that the nearest ant-city was miles away,

and that the small insects would trouble them but rarely. (The nightly rush of water down the sloping sides of the mountain made it undesirable for the site of an ant colony.)

And best of all, back in the little pocket in the mountainside, they found old and dilapidated cells of hunting wasps. The walls of the pocket were made of soft sandstone with alternate layers of clay, and the wasps had found darning easy.

There were a dozen or more burrows, the shaft of each some four feet in diameter and going back into the cliff for nearly thirty feet, where they branched out into a number of cells. Each of the cells had once held a grub which had grown fat and large upon its hoard of paralyzed crickets, and then had broken away to the outer world to emerge as a full-grown wasp.

Now, however, the laboriously tunneled caverns would furnish a hiding-place for the tribe of men, a far more secure hiding-place than the center of the mushroom thickets. And, furthermore, a hiding-place which, because more permanent, would gradually become a possession for which the men would fight.

It is a curious thing that the advancement of a people from a state of savagery and continual warfare to civilization and continual peace is not made by the elimination of the causes of strife, but by the addition of new objects and ideals, in defense of which that same people will offer battle.

A single chrysalis was found securely anchored to the underside of a rock-shelf, and Burl detached it with great labor and carried it into one of the burrows, though the task was one that was almost beyond his strength. He desired the butterfly that would emerge for his own use.

He prompted, too, a solitary burrow a little distant from the others, and made preparations for an event that was destined to make his plans wiser and more far-reaching than before.

His followers were equally busy with their various burrows, gathering stores of soft growth for their couches, and later—at Burl's suggestion—even carrying within the dark caverns the radiant hands of the luminous mushrooms to furnish illumination. The light would be dim, and after the mushroom had partly dried it would cease, but for a people utterly ignorant of fire it was far from a bad plan.

Burl was very happy for that time. His people looked upon him as a savior, and obeyed his least order without question. He was growing to repose some measure of trust in them, too, as men who began to have some glimmerings of the new-found courage that had come to him, and which he had striven hard to implant in their breasts.

The tribe had been a formless gathering of people. There were six or seven men and as many women, and naturally families had come into being—sometimes after fierce and absurd fights among the men—but the families were not the sharply distinct agreements they would have been in a tribe of higher development.

The marriage was but an agreement, terminable at any time, and the men had but little of the feeling of parenthood, though the women had all the fierce maternal instinct of the insects about them.

These burrows in which the tribefolk were making their homes would put an end to the casual nature of the marriage bonds. They were homes in the making—damp and humid burrows without fire or heat, but homes, nevertheless. The family may come before the home, in the development of mankind, but it invariably exists when the home has been made.

The tribe had been upon the plateau for nearly a week when Burl found that stirrings and straggings were going on within the huge cocoon he had laid close beside the burrow he had chosen for his own. He cast aside all other work, and waited patiently for the thing he knew was about to happen. He squatted on his haunches beside the huge, oblong cylinder, his spear in his hand, waiting patiently. From time to time he nibbled at a bit of edible mushroom.

Burl had acquired many new traits, among which a little foresight was most prominent, but he had never conquered the habit of feeling hungry at any and every time that food was near at hand. He had to wait. He had food. Therefore, he ate.

The sound of scrapings came from the closed cocoon, ended upon its outer side with dirt and soil. The scraping and scratching continued, and presently a tiny hole showed, which rapidly enlarged. Tiny jaws and a dry, glazed skin became visible, the skin looking as if it had been varnished with many coats of brown shales. Then a mal-formed head forced its way through and stopped.

All motion ceased for a matter of perhaps half an hour, and then the strange, blind head seemed to become distended, to be swelling. A crack appeared along its upper part, which lengthened and grew wide. And then a second head appeared from within the first.

This head was soft and downy, and a slender proboscis was coiled beneath its lower edge like the trunk of one of the elephants that had been extinct for many thousand years. Soft scales and fine hairs alternated to cover it, and two immense, many-faceted eyes gazed mildly at the world on which it was looking for the first time. The color of the whole was purest milky-white.

Slowly and painfully, assisting itself by slender, colorless legs that seemed strangely feeble and trembling, a butterfly crawled from the cocoon. Its wings were folded and lifeless, without substance or color, but the body was a perfect white. The butterfly moved a little distance from its cocoon and slowly unfurled its wings. With the action, life seemed to be pumped into them from some hidden spring in the insect's body. The slender antennae spread out and waved gently in the warm air. The wings were becoming broad expanses of snowy velvet.

A trace of eagerness seemed to come into the butterfly's actions. Somewhere there in the valley sweet food and joyous companions awaited it. Fluttering above the fungus of the hillside, surely there was a mate with whom the joys of love were to be shared, surely upon those gigantic patches of green, half hidden in the haze, there would be laid tiny golden eggs that in time would hatch into small, fat grubs.

Strength came to the butterfly's limbs. Its

wings were spread and closed with a new assurance. It spread them once more, and raised them to make the first flight of this new existence in a marvelous world, full of delights and adventures—Burl struck home with his spear.

The delicate limbs struggled in agony, the wings fluttered helplessly, and in a little while the butterfly lay still upon the fungus-carpeted earth, and Burl leaned over to strip away the great wings of snow-white velvet, to sever the long and slender antennae, and then to call his tribesman and hid them there in the food he had for them.

And there was a feast that afternoon. The tribesmen sat about the white carcasses, cracking open the delicate limbs for the meat within them, and Burl made sure that Says secured the choicest bits. The tribesmen were happy. Then one of the children of the tribe stretched a hand aloft and pointed up the mountainside.

Coming slowly down the slanting earth was a long, narrow file of living animals. For a time the file seemed to be but one creature, but Burl's keen eyes soon saw that there were many. They were caterpillars, each one perhaps ten feet long, each with a tiny black head armed with sharp jaws, and with delirious fur upon their backs. The rear of the procession was lost in the mist of the low-hanging cloud-banks that covered the mountainside some two thousand feet above the plateau, but the foremost was no more than three hundred yards away.

Slowly and solemnly the procession came on, the black head of the second touching the rear of the first, and the head of the third touching the rear of the second. In faithless alignment, without intervals, they moved steadily down the slanting side of the mountain.

Save the first, they seemed absorbed in maintaining their perfect formation, but the leader constantly rose upon his hinder half and waved the fore part of his body in the air, first to the right and then to the left, as if searching out the path he would follow.

The tribesfolk watched in amazement mingled with terror. Only Burl was calm. He had never seen a slug that meant danger to man, and he reasoned that these were at any rate moving slowly so that they could be distanced by the faster-footed human beings, but he also meant to be cautious.

The slow march kept on. The rear of the procession of caterpillars emerged from the cloud-bank, and Burl saw that a shining white line was left behind them. No less than eighty great caterpillars clad in white and dingy red were solemnly moving down the mountainside, leaving a path of shining silk behind them. Head to tail, in single file, they had no eyes or ears for anything but their procession.

The leader reached the plateau, and turned. He came to the cluster of giant cabbages, and ignored them. He came to a thicket of mushrooms, and passed through it, followed by his devoted band. Then he came to an open space where the earth was soft and sandy, where sandstone had weathered and made a great heap of easily moved earth.

The leading caterpillar halted, and began to burrow experimentally in the ground. The result

pleased him, and some signal seemed to pass along the eight-hundred-foot line of creatures. The leader began to dig with feet and jaws, working furiously to cover himself completely with the soft earth. Those immediately behind him abandoned their formation, and pressed forward in haste. Those still farther back moved more hurriedly.

All, when they reached the spot selected by the leader, abandoned any attempt to keep to their line, and hastened to find an unoccupied spot in the open space in which to bury themselves.

For perhaps half an hour the clearing was the scene of intense activity, incredible activity. Hugs, ten-foot bodies burrowed desperately in the whitish earth, digging frantically to cover themselves.

After the half-hour, however, the last of the caterpillars had vanished. Only an occasional movement of the earth from the struggle of a hurried creature to bury itself still deeper, and the freshly turned surface showed that beneath the clearing on the plateau eighty great slugs were preparing themselves for the sleep of metamorphosis. The piled-up earth and the broad, white band of silk, leading back up the hillside until it became lost in the clouds, alone remained to tell of the visitation.

The tribesmen had watched in amazement. They had never seen these creatures before, but they knew, of course, why they had entombed themselves. Had they known what the scientists of thirty thousand years before had written in weighty and dull books, they would have deduced from the appearance of the processionary caterpillars—or pine-caterpillars—that somewhere above the banks of clouds there were growing trees and sunlight, that a moon shone down, and stars twinkled from the blue vault of a cloudless sky.

But the tribesmen did not know. They only knew that there, beneath the soft earth, was a mighty store of food for them when they cared to dig for it, that their provisions for many months were secure, and that Burl, their leader, was a great and mighty man for having led them to this land of safety and plenty.

Burl read their emotions in their eyes, but better than their amazement and wonderment was a glance that had nothing whatever to do with his leadership of the tribe. And then Burl rose, and took the two snowy-white velvet cloaks from the wings of the white butterfly. One of them he flung about his own shoulders, and the other he flung about Says. And then those two stood up before the wide-eyed tribesmen, and Burl spoke:

"This is my mate, and my food is her food, and her wrath is my wrath. My burrow is her burrow, and her sorrow, my sorrow.

"Men whom I have led to this land of plenty, hear me. As ye obey my words, see to it that the words of Says are obeyed likewise, for my spear will loose the life from any man who angers her. Know that as I am great beyond all other men, so Says is great beyond all other women, for I say it, and it is so."

And he drew Says toward him, trembling slightly, and put his arm about her waist before all the tribe, and the tribesmen murmured in acquiescent whispers

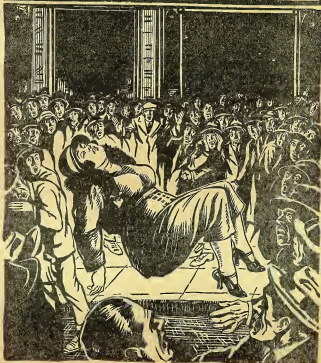
(Continued on page 968)

# The MAN WHO COULD VANISH

By A. Hyatt Verrill

Author of "Beyond the Pole" and "Through the Crater's Rim."

## PHARMACIST



Instantly pandemonium broke loose. Screams, shouts, lightened when men from the crowd which had quickly gathered, and were unable to believe their eyes, men, women and children surged, crowded and fought to make way for the woman's form falling in all through their midst.

## PROLOGUE



ON the third day of last August the public was astounded by a story which appeared in every newspaper in the country. Extra editions of even the most staid and conservative papers appeared on the streets shortly after noon and, in screaming headlines, announced:

**"HARTWELL BUILDING DISAPPEARS. TWENTY STORY STRUCTURE VANISHES IN BROAD DAYLIGHT AND REAPPEARS. MARVELOUS AND INEXPLICABLE ILLUSION WITNESSED BY CROWDS. BELIEVED TO BE A DEMONSTRATION BY SOME MASTER HYPNOTIST SEEKING PUBLICITY."**

It is not necessary to quote the stories that occupied entire pages of the press, for while all agreed in the main essentials, no two were the same and all contained glaring errors and discrepancies. Moreover, the events must still be fresh in the minds of my readers. Suffice to say that each and every account stated that the new Hartwell Building, in process of construction on Nineteenth Street, had suddenly vanished from sight during the noon hour; that hundreds of citizens had packed the thoroughfare; that the police and fire departments had been called out, and that, for a space of several minutes, only a vacant lot and an immense excavation had been visible where the building had stood. Then, while the crowd looked on, the structure had reappeared as suddenly and mysteriously as it had vanished.

The story was so utterly incredible that, at first, many persons thought it merely a canard or some advertising or publicity scheme. But as, during the following days, the press was filled with accounts of the phenomenon as related by eyewitnesses, and as the police and fire department officials confirmed the reports, and there could be no question regarding the authenticity of the story, innumerable theories and explanations were suggested, and so for days the crowds thronged the streets near the Hartwell Building and stood, gazing expectantly, in the hopes that it might repeat its mysterious behavior.

The consensus of opinion was that the astounding occurrence had been brought about by some hypnotist or folk who, as the East Indian magicians are supposed to do, had hypnotized the onlookers, and that the disappearance of the building had been wholly an illusion. "No doubt," said the *"Times,"* "the public will soon be informed that Signor So-and-So, the world's greatest hypnotist and illusionist, will appear at a certain theatre, with a further announcement of the fact that the Signor deluded

hundreds of persons, and by his mesmeric powers, caused them to believe that a twenty-story building could vanish into thin air."

But as time went on and no one came forward to claim the doubtful honor of being able to accomplish such a feat, by hypnotism or otherwise, the mystery deepened, and every conceivable theory—both natural and supernatural, was advanced to explain the wholly unaccountable phenomenon.

Up to the present time the truth has never been known, and only two men in the world are aware of the actual facts and the real solution of the mystery. One of these is Doctor Lemuel Union, Professor of Physics at Stanford University, and my lifetime friend and college chum; the other is myself. As the time has now passed when any harm can come from giving the true story to the world, and as the explanation is even more incredible and remarkable than any of the imaginary solutions put forth, we have agreed that the public should be made acquainted with the facts. Indeed, the authentic story would have been published some months ago had it not been essential to make certain arrangements to safeguard the secret, and whose making required much more time than had been anticipated.

In order to make clear just how the astounding occurrence took place, and to enable my readers to thoroughly understand my true if incredible story, it will be necessary to begin at the beginning and to recount every detail of the events which led to the final results. To many readers much of this matter will, no doubt, prove rather dry, and, if I were writing fiction, I would omit all those portions of the

tale which deal with the scientific side and the preliminaries. But both Dr. Union and myself feel that to omit such matters would be a great mistake, and that as the story is of as much interest and importance to the scientific world as to the layman, nothing should be left untold. Moreover, we feel that unless such matters were included my story would be considered as purely fictitious. And at any rate the reader is at liberty to skip such portions of my narrative as the appreciative reader may find to be lacking in real and genuine interest.

## CHAPTER I

## Doctor Union Propounds Some Theories

IT really began when I was visiting my old friend and college chum, Dr. Lemuel Union, soon after his return from an international conference of scientists.

He had been telling me of the various new discoveries which had been announced by his fellows, and mentioned certain phenomena of light rays,

*If you have read "Beyond the Pole", by A. Ryan Powell, you will be deeply interested in the present story by the same author. He has no hesitancy in recommending it, and at the same time stating that you believe it is one of the greatest stories on man-made invisibility which has ever appeared. In these latter days of science it would be rash to say that invisibility can not be produced. Already Dr. John Stone, of Alameda-California, has produced perfect invisibility by injecting certain liquids into animal tissue, which make the animal practically transparent when it is viewed in a certain light. The full details of his experiments were published in the February, 1911, issue of SCIENCE AND INVENTION. No experiments have been made on human beings as yet, but there is no question that sooner or later the problem of invisibility will be solved. Just what might happen when the secret is found is well related by the author of this story, which you will read not only with great interest but with much amusement as well.*

which, hitherto unseen, had now been brought within the scope of human vision. Although I could not, as a layman, see the importance of the discovery, my friend was most enthusiastic about the matter, and, among other statements, declared that it might yet be possible to render objects invisible.

I laughed. "That is utterly impossible," I declared.

"Nothing within the realm of Science is impossible," he retorted.

"Perhaps not," I admitted, "but there are many things which are so highly improbable that to all intents and purposes they are beyond possibility or reason."

"Utter nonsense!" he ejaculated. "Ignorance, lack of imagination, pig-headed conservatism. Every advance made by Science has been declared improbable or impossible, or both, until its feasibility has been proven. Railways, steamships, the telegraph and telephone, radio, airplanes—all have been laughed at and declared impossibilities until they became actualities. Science," he went on, assuming his lecture-room manner, and looking at me over the rims of his glasses, "Science does not acknowledge the existence of the world impossible and improbable. What seems a mere dream today may become an every-day affair tomorrow. The scientist—"

"Oh, all right," I laughed. "Cut out the lecture. Granting that nothing is beyond Science, as represented by my old friend, Leonard Unsinn, how do you propose going about it?"

"I presume you refer to the matter of rendering visible objects invisible," he smiled, leaning back in his chair and placing the tips of his fingers together.

I nodded.

"Hum, I hardly care to divulge all my ideas, even to such an old friend as yourself," he chuckled. "But I am willing to suggest lines along which such investigations might be conducted. You state that it is preposterous to consider making visible, solid matter invisible. Is it any more preposterous then to make inaudible sounds audible, invisible things visible, or audible sounds inaudible?"

I shook my head. "No, I'd say one's as impossible as the other."

Leonard grinned. "Which shows your monumental ignorance," he exclaimed. "My dear boy," he continued, "those facts are all accomplished facts and are so familiar to you that you do not realize they exist. The inaudible waves transmitted by radio are rendered audible in the receiving set; the audible waves which enter the microphone of the transmitting station are sent inaudibly through the ether; and heat, which is invisible under certain conditions is plainly visible under other conditions which occur every day."

"Yes," I granted rather grudgingly, "I'll admit the matter of sounds, but I'd like to know when and how heat can be seen. That is, unless you refer to the wavy effect seen above a pavement or sand on a hot day."

"No, there you have air, usually invisible, rendered visible by its motion," replied my friend. "But you have undoubtedly seen red-hot or white-hot

metal. And there you have heat made visible. Heat, sound, light and probably scent also, are all caused by vibratory waves. Waves varying in length from the shortest X-rays and Gamma rays to the longest recorded waves; waves varying from less than a billionth part of a meter to over one-hundred-and-fifty thousand meters in length. Unfortunately, however, the human system is not designed or attuned to register or recognize more than an infinitely small proportion of these vibratory waves. Our eyes can only record those which range between violet and red, but our nerves and ears can detect others which are invisible. For example, there are the heat waves which are too long for us to see. But if, by heating an object, we decrease the length of the waves until they come within the limits of our vision we see the heat waves as red. And by still further heating the object the hotter waves appear to us as violet, white or yellow; white being, as you know, merely a mixture or combination of the various light waves. In other words, my dear boy, our eyes, our nerves, our ears, and in all probability our noses as well, are much like radio receiving sets. We can 'tune in' waves of light, sound, heat and scent within certain limits, and, like radio receiving sets, we often fail to 'tune out' interferences. Many sounds are far too high or too low for the human ear to detect, just as many light waves are too short or too long for us to see."

"All extremely interesting and educational!" I said. "But what bearing does all this have on the matter under discussion—the rendering of various objects—any object I believe you said,—invisible?"

"Let me reply by asking you a question," smiled my friend. "Why are objects—human beings, houses, trees, anything we see,—visible? Merely because they reflect light," he continued without waiting for my answer. "Very well, then. We see an object because it reflects light; we see colors on that object because it has properties which cause it to absorb certain light rays and to reflect others—if red to us, it absorbs the violet, indigo, blue, green, yellow and orange rays. If it appears white it reflects all the rays. If black, it absorbs them. In other words we do not actually see the object at all. We merely see the light waves reflected from the object. And if means can be found to cause the object to absorb the light rays—"

"You'd have a black object instead of a colored one," I laughed.

"Exactly," agreed my friend quite unperturbed. "Provided the absorption was imperfect," he added. "But," he continued, "if the means were such as to cause perfect absorption, in other words to allow the light waves to pass through the object, then it would become invisible, just as clear glass is invisible, even though glass reflects certain waves of light which cannot be detected by the human eye."

I chuckled. The idea of transforming opaque objects to transparent objects seemed highly amusing. "Go to it," I laughed, "Why not begin with the ladies? Their clothes are pretty nearly transparent now."

"If you're trying to be facetious there's no use

in my attempting to explain my ideas and theories," commented Dr. Unstien in an injured tone.

"I wasn't laughing at your theories," I assured him. "And I'm really interested, even if I don't see what you're getting at."

"If your sense of logic and your knowledge of science were as highly developed as your sense of humor and your knowledge of women's garments, you might more readily grasp what I am 'getting at' as you put it," he said dryly. "However," he continued, "I had no intention of conveying the idea that I believed visible objects could be rendered invisible by such means. But if, by altering the frequency or lengths of light waves reflected from an object, we could render such waves too short or too long for the human eye to register, then the object would become wholly invisible."

By this time I was really interested. My friend's arguments were, I knew, sound. If the frequency of one form of vibratory waves could be altered; if an oscillating wave could be changed to a direct wave or vice versa, if the inaudible radio waves could be made audible by the simplest of instruments, was there any scientific reason why light waves ordinarily visible might not be made invisible?

"And the man who succeeds in accomplishing such a feat will control the world," declared Dr. Unstien interrupting my thoughts. "Imagine it! Think for a moment what it would mean! He could command anything, everything. He could amass millions, billions if he wished. He could control the destinies of nations! No treaties, no plots, no business deals could be secret. He could go anywhere, unknown, unsuspected, unseen. Why," he exclaimed, as he sprang from his chair and began excitedly pacing the room. "Think what it would mean to a nation! Armies, battleships, invincible! And—"

"Think what it would mean to the crooks," I broke in. "Better not delve too far, Old Man. You might succeed and your secret might leak out. Well, I must be going. Good luck to you in your experiments. And—with a laugh, 'Let's hope that the next time I see you I shan't see you at all.'"

## CHAPTER II

### An Amazing Demonstration

**A** FEW days after the foregoing conversation with my old friend, Doctor Unstien, important business unexpectedly called me to South America.

Although his words often occurred to me on the long journey south, yet I gave them little serious consideration, for I knew that Lemuel, like so many scientific men, was prone to theorize and to argue most plausibly and convincingly in support of some theory, even if he had no real faith in it. And, amid new scenes and new friends, and with matters of much more pressing importance to occupy my attention, all thoughts of Dr. Unstien's weird ideas were completely driven from my mind.

Not until several months later, when I was homeward bound, did I again think of our last con-

versation. I had, to be sure, dropped him a postcard now and then, but I had received no reply and did not expect any. Lemuel was never one to write, and he considered it a waste of time to carry on a purposeless correspondence with anyone, although he would fill page after page with facts, figures and theories in letters to other scientists. Now, however, as I recalled our conversation, I found myself wondering if he had actually attempted to carry his theory to a test. Of course the idea was ridiculously bizarre and unattainable and yet, I felt sure that Dr. Unstien had actually been in earnest and really believed that it was scientifically possible to produce invisibility in solid matter.

And the more I mentally reviewed his words and analyzed his statements, the more I felt that he might be right, at least theoretically. After all, was such a feat any more remarkable than the fact that the ship's wireless operator was talking and listening to people thousands of miles distant and separated from our ship by countless leagues of sea and land? And yet the idea of any material object being invisible seemed so far-fetched and supernatural that I could not bring myself to believe that Lemuel would ever attempt to experiment along such lines. Nevertheless, I had thought so much on the subject that, at the first opportunity after my arrival, and reaching my apartment, I called Dr. Unstien, by phone and, after the usual greetings, asked how he was succeeding in his black art. Perhaps he felt slightly piqued at my tone or my words, but instantly there was a change in his voice and he replied, rather shortly, that it was evident that I had not improved in my attitude towards science, but that, as an old chum and friend, he would be glad to have me call whenever I found it convenient.

Just why my curiosity had been aroused I cannot say, but curious I was nevertheless and within the hour I was at Lemuel's door. His Filipino servant Miguel, answered the bell and greeted me with a welcoming grin on his usually emotionless face.

"The Sefior Doctor is in the laboratory," he announced as I entered. "He say you will please to await him in the library. He will arrive in one little moment."

I was somewhat surprised for, as a rule, I was welcome to enter Lemuel's holy of holies whenever I called, and never before had I been asked to await his pleasure like a perfect stranger. But no doubt I thought, he was busy on some delicate experiment and did not wish to be interrupted. Entering the library I turned to a table littered with magazines and scientific reports and rather idly glanced through them. A sound, like the creaking of a footstep on a loose board caused me to turn, but the door was open, the hallway was in plain view and no one was in sight. Once more I resumed my perusal of the periodicals and was becoming a bit interested in an article I ran across, when I was startled by a low chuckle. Instantly I wheeled about, surprised that I had not heard my friend's approach, only to find the room empty. Then, as I stood, rather foolishly gaping I fear, and puzzled to understand how my ears had deceived me, I fairly jumped. Out of the obviously empty room came Dr. Unstien's unmistakable voice.



"Sorry to have kept you waiting," it said, "You're looking exceedingly well after your trip."

For an instant a strange creepy sensation swept over me. Then I realized that this must be one of my friend's practical jokes. No doubt he had installed some sort of telephone or loud speaker arrangement in the apartment and was teasing it out on me.

As nearly as I could judge, the words had come from the farther corner of the room where there was a large, deeply-upholstered chair. Taking a step nearer, I peered into the corner, trying to discover the hidden instrument. And as I gazed at the chair I rubbed my eyes and wondered if I were taking leave of my senses.

Slightly above the back of the chair and suspended in mid-air were a pair of spectacles. On the left side and a short distance below was a round metal disc and also seemingly floating in the atmosphere, were a number of buttons, a gold watch and chain, two small ornamental silver buckles, some cuff links and a large signet ring. Just below these and suspended a few inches above the chair seat were several silver coins, while just above the floor four rows of small metal rings hung without any support whatsoever.

Even while I gazed, dumbfounded, utterly at a loss to account for this strange hallucination, that ghostly chuckle again issued from the corner, and I saw the various objects sway, the coins shift their position and the ring move towards the spectacles which seemed to follow it, as though drawn by a magnet, as it again descended to its former position. Then, once again, the uncanny voice spoke.

"My dear boy, your expression is most remarkable," it said. "You really should see yourself. But it is most gratifying to me for it proves my test is a success. If I remember correctly, you remarked, when I last saw you, that you hoped the next time you saw me you would not see me at all. Well, your wish is granted, you are gazing—or rather I might say, gazing, at me without seeing me. But I do not wonder you are amazed and also incredulous—don't deny it, I can see you think this some hoax. However—"

I had been gazing, gazing; jaw dropped, mouth open, eyes fairly popping, as the voice spoke, and fascinated, I saw the watch, the discs and the money slowly rise upward and come towards me. The next instant I fairly shrieked and leaped back. An unseen ghostly hand had gripped my shoulder! A hearty peal of laughter rang through the apartment as, shaken, almost terror stricken, I shrank back against the old-fashioned mantel.

"Yes, my experiment is a complete success," announced the disembodied voice, "but there is no need to carry the test further. You see my 'black art' as you call it has worked, and the impossible has been made possible. But I feel you will be more at ease if I am visible. No doubt it will take time to re-orient yourself to the phenomenon."

Hardly had the last word been issued when the watch, the discs and the coins vanished, and Dr. Urstun stood before me, as solid, as substantial and as natural as ever.

I collapsed. It was almost as great a shock to my

nerves to see my friend materialize from the air as it had been to hear his voice, to feel his grip when he had been invisible, yet, invisible, for no longer could I doubt that the scientist had succeeded in making the impossible possible.

"I think I have answered your query of this morning," exclaimed Dr. Urstun triumphantly, as he seated himself in his favorite chair. "I felt quite sure of my success even before you arrived," he continued. "I could not be sure, however, for, strangely enough,—and quite surprising and as yet somewhat inexplicable to me, I can see myself in a mirror even when invisible to others. But I tried it to a slight extent on Miguel, although I dared not put the fellow to a thorough test,—see superstitious and excitable you know. Might have died of fright or have bolted, if I had spoken, or if he had noticed anything such as my watch or buttons. Ah, you noticed such objects did you not?"

By this time I had regained a bit of my composure and enough breath to speak. "I say I did," I replied. "But why allow such objects to remain visible?"

"Hmm, that is my great difficulty," replied Lemuel regretfully. "It is obvious that the same treatment will not serve for all objects. I have learned how to render my organic substance invisible, but, as yet, I have not discovered how to accomplish the result with inorganic matter. My body, my clothing, my shoes, you, even objects of wood are, by my method, easily rendered invisible, but metals—my watch, my suspender buttons, the coins in my pocket and the eyegles for my shoe strings resist, so far, all my efforts."

"But how," I interrupted, "do you do it?"

Dr. Urstun smiled knowingly. "That is a secret I do not care to divulge," he replied. "But," he went on, "in a general way it is along the lines I suggested during our last conversation on the subject,—by altering the frequency of light waves so that they become invisible to the human eye. As you, my friend, are deplorably ignorant of higher physics, I may perhaps better explain the process by comparing it with certain phenomena of radio with which you may be more or less familiar. Do you know the meaning of the term 'heterodyne'?"

I nodded.

"Good," continued Lemuel. "Then I can state that by my process I send out certain vibratory waves from my apparatus, and these, striking the light rays, reflect them back with a frequency which renders them invisible. In other words, the light rays which would, normally, strike a solid object, and, being reflected therefrom, would cause that object to become visible, are prevented from striking that object by my method, but strike an armor of an envelope of outgoing vibratory waves. Is that clear?"

"Perfectly," I had blithely, not in the least understanding the scientific side of the explanation, but deeply interested nevertheless. "But," I asked, "I don't understand why some objects remain visible while others vanish, and I didn't notice any apparatus for bringing on your astounding invisibility."

"I do not myself fully understand why organic

objects should respond to my treatment and inorganic objects should resist it," admitted my friend. "But it is probably due to the fact that inorganic materials do not throw off my vibratory waves at the same frequency as organic materials. But I will solve the problem; I must solve it! As for your other query, the appliance which I employ is very compact and becomes invisible together with myself. At first the apparatus was cumbersome and clumsy, but I have now perfected it and have it as readily and perfectly under control that it is even more simple than tuning-in on a small radio receiving set. Indeed, the results may be brought about slowly and gradually, as I will demonstrate."

As Dr. Unslun stood before me a strange, incredibly weird change came over him. A thin haze seemed to envelop his body, and as I stared fascinated, the haze seemed slowly to clear away and to my indescribable amazement I saw the curtained doorway leading into the room whose portiere and parts of whose frame appeared through my friend's body and head. If ever there was a ghost Lemuel was one. And then, as if snuffed out, Lemuel completely vanished and only his spectacles, the fraternity button on his lapel, his watch and chain, his cuff-links, his belt and arm-garter buckles, his ring, watch and chain and the other metallic objects of his apparel remained to assure my racing senses that Dr. Unslun still stood before me.

I cannot begin to describe the sensation of thus seeing my companion vanish before my eyes, but it was nothing compared to the creepy, uneasy nerve-racking sensation which followed, as Lemuel's characteristic chuckle issued from the transparent air and he again spoke.

"For Heaven's sake!" I cried, "Don't do that. I'll have a nervous collapse if that disembodied voice of yours keeps on."

The voice laughed, but the next instant my friend was before me as substantial as ever.

"You'll get accustomed to the sensation," he declared, "but—"

"Never," I broke in. "No normal person could ever get accustomed to seeing a man vanish before his eyes or to hearing a voice talking from thin air."

"Hum, I had rather expected something of this sort," admitted Lemuel. "No doubt it is a bit unnerving but you must accustom yourself to the phenomenon. Now, if you will follow my directions and, using a duplicate instrument, will render yourself invisible—"

"I will not!" I declared. "I have no desire to try the experiment. But even if I did I fail to see how that would render your disappearance any less un-  
easy."

"It is my belief," replied Dr. Unslun, "that if you were treated by my waves I would still be visible to you and you to me. I am, as I informed you, quite visible to myself when I look in a mirror. This anomaly is due to some effect which my apparatus exercises upon the optic nerves, thus enabling the eye to register the light-waves even when their frequency is accelerated. I am most

anxious to test the matter and you will confer a great favor by acceding to my wishes."

"Not a bit of it," I declared. "You can monkey with such things all you wish, but I'm perfectly satisfied to remain visible."

Lemuel shook his head sadly. "You're a conservative imbecile," he informed me. "I had counted on your accompanying me, as I go about, in order to note the effect upon the public, and it would be most desirable that you should also be invisible."

"Look here," I said, "I know you can vanish; I know it's all a perfectly natural feat, but it's too devilishly creepy and uneasy for my nerves. And if you're going to keep on being snuffed out and talking from an invisible mouth I'll leave you to your own devices and not come near your place."

Dr. Unslun grinned. "You forget that you couldn't prevent me from coming to see you," he reminded me. "I could enter your apartment unseen and unsuspected. I might be seated on one of your chairs or lying on a couch in the same room with you and you'd never suspect it."

"If I didn't see your confounded watch and other metallic articles," I asserted. "But with all your damned scientific order I know you're not one to butt-in where you're not wanted,—even for the sake of an experiment."

"But all joking aside," said my friend, "I am sorry that your nerves should be upset by my demonstration. However, there is, I think, a means of overcoming all your objections and yet helping me with my most valuable and interesting experiments. I have, in fact, devised a little instrument which will enable you to see me even when I am invisible to others."

Rising, he opened a cabinet, and turning, handed me a small rectangular box slightly larger than a cigarette case. To one end of the box a fine braided cord was attached with the other and terminating in a pair of metal-rimmed, slightly tinted, eye-glasses.

"If you will place the detector case in your pocket and adjust the glasses on your nose, we will try an interesting test," announced Dr. Unslun.

"Look here," I said. "Is this some damned trick to make me invisible?"

"I assure you it is not," he declared. "But if I am not vastly mistaken it will prevent me from becoming invisible to you."

Somewhat hesitatingly, and without the least faith in the apparently simple device, I slipped the case in my breast pocket and placed the glasses on my nose. As far as I could see all objects remained the same as before, though everything, including Lemuel's face, took on a peculiar pinkish tint, due, I supposed, to the color of the glasses.

"I presume you have no difficulty in seeing the various objects about the room, including myself," said my friend.

"Not a bit," I assured him.

"Then, if you will kindly press the lever on the case we will proceed."

Examining the case, I noticed a small lever or arm which fitted snugly into a small groove on one edge of the affair.

"Lift the lever and move it forward—toward the cord, as far as it will go," said my friend.

A slight click followed by an almost inaudible whistling sound issued from the case as I obeyed his instructions. But, as far as I could see, there were no other results. Lemuel still sat in his chair, his legs crossed, his elbows on the chair-arms, the tips of his fingers together, and his mild blue eyes looking over the tops of his glasses.

"The confounded contraption's a dud," I exclaimed, "everything's just the same."

"Precisely," my friend agreed. "But just remove the glasses from your eyes for a moment."

As I complied with his request I uttered a cry of utter amazement. Dr. Unsinn was absolutely invisible!

"Now replace the glasses," said his disembodied voice.

Hardly knowing what to expect, absolutely dumbfounded, I again placed the glasses before my eyes and there sat my friend as before. I could not believe it. I could not believe that this "now you see him and now you don't" effect was produced by the glasses. No, I felt sure, it was a trick on Lemuel's part. He must manage to vanish and to reappear coincidentally with my donning or removing the lenses. But he assured me,—quite heartily and convincingly,—that he had remained in the invisible state throughout the experiment, and, moreover, he was so evidently highly elated at the success of his invention that at last I was forced to believe that the magic glasses actually rendered the invisible visible. But my brain was now in a complete chaos. My friend's power to render himself invisible, the fact that certain objects remained visible, the effect of the glasses rendering him visible to me while still invisible to ordinary eyes, were all unquestionable facts; but they were so weird, uncanny and downright supernatural, that I felt as if in a confused, preposterous dream, and I half expected to wake up at any moment.

"It's splendid," exclaimed Lemuel, interrupting my chaotic thoughts. "Even if I cannot overcome your absurd and unreasonable objections to becoming invisible it now matters little."

"Look here!" I ejaculated. "Just what are you planning to do? Are you going out to amaze the millions you spoke of, to control the world? I'll admit there's no reason why you should not succeed,—possessing your secret, nothing is impossible of attainment, but if you plan taking me along you're mistaken. I'm not invisible and I don't intend to be, and I can easily foresee where I'd be the guest for any confounded ghastly acts you perpetrated."

Dr. Unsinn laughed heartily. "My dear boy!" he cried, controlling his merriment. "You appear to forget that I am a scientist and a respected member of the community with a reputation to uphold. I have not the least desire nor intention to overstep the bounds of honesty, law, or proper behavior, even if invisible. If I were so minded I could, as you know, help myself to the world's treasures, could control the destinies of nations, could in fact place myself beyond the power of man or the law. But my sole idea is to use my discovery for the benefit of mankind, to perfect it and give it to the world, as

so many great discoveries have been given. We men of science are never materialists."

"You're an idiot!" I exclaimed. "Benefit of mankind! Give it to the world! Why, if you gave your discovery to the world,—if you gave the secret to anyone,—it would be a curse to mankind; you'd be destroying law and order and the world!"

"Hm, perhaps there is something in that," admitted Lemuel regretfully. "But at any rate, I must discover how to treat inorganic substances before any very extensive experiments can be conducted. It would hardly do for a crowd to see a watch and buttons wandering about without visible attachment or reason."

"You might leave your watch behind, and use bone or fibre buttons," I suggested.

"But, my dear man," objected my friend, "unless I can render all substances invisible I shall feel that my efforts have been in vain."

"And I sincerely hope you fail," I informed him. "I don't see what good it will do for the rest of the world, and if it leaks out, Heaven help us."

"Just what thousands of conservative hide-bound persons have said of every great discovery of the past," exclaimed Lemuel, as I rose to take my leave.

### CHAPTER III

#### Dr. Unsinn Perfects His Invention

AS I walked towards my apartment, my mind was, of course, filled with thoughts of my friend's amazing discovery. And, among other matters, it came to me, as a rather curious and amusing fact, that Dr. Unsinn, who had dwelt so enthusiastically upon the material possibilities of invisibility, when he first discussed the matter, was now far more interested in proving his scientific theories than in profiting by his discovery. It was typical of the man, and is, I believe, of most scientists. But a more disturbing thought was that my friend was deplorably absent-minded,—a common trait of scientists also, especially when preoccupied with some experiment, and, being so inherently honest and frank himself, he was too prone to assume that his fellow-beings were the same. In this lay, so I feared, a very grave danger. I remembered occasions in the past when, suddenly sidetracked by some new lead, he had completely forgotten formulas or calculations which had enabled him to succeed in some experiment, and had never been able to duplicate the results. Might he not, in endeavoring to perfect some feature of his own discovery, forget some important detail and find himself unable to restore himself to visible form? It was in fact this chance that had caused me to refuse to test his device upon myself. I could see where it might be most entertaining and advantageous to become invisible temporarily, but I had no desire to remain in that condition indefinitely, and any failure of Lemuel's device, any miscalculation, any accident or any sudden illness on his part might leave me forever incapable of regaining my visible form. The risk to be sure might be small, but it was far too great for me to take. And finally, there was the chance that Dr. Unsinn might, in his ardor and enthusiasm, divulge his secret. Unquestion-

ably he would wish to announce his discovery to his fellow scientists; if he did so some one would make the fact public and then, as I had said to Lemuel, Heaven help mankind. My head swam and I fairly trembled at thought of what would occur should my friend's secret fall into the hands of unprincipled men. Law, society, governments would be powerless. Possessing the power to become invisible, crooks could defy the world. They could loot banks, state treasuries, mints and all other sources of hoarded millions, unseen, unhampered and leaving no traces of their identity. Murder, robbery, rapine, any and all crimes could be committed without fear of detection or punishment. Even if caught unawares and thrown into prison an invisible man could walk out without being seen. No walls could hold him, no court try him, no punishment be doled him. And even if the secret were known to all, it would make little difference, unless, as Lemuel had seemed to think, a person invisible himself could see others when under the effect of the apparatus. The next instant I laughed out so loudly that passers-by turned and stared at me. What a fool I had been! How ridiculous my worry over any such possibility! I had forgotten about the marvelous glasses! My friend's secret might become public property and yet be harmless, even in the hands of the most desperate criminals. Just as there is an antidote for every poison, as Lemuel's magic glasses would safeguard the world from any evil that might result from his discovery. Moreover, there was always the chance that he would be unable to discover a means of rendering inorganic matter invisible, and if so, his invention would be of little value either to honest or dishonest men. At thought of the weird situations that might result, I shuddered. I could imagine a gunman, himself invisible, holding up some citizen, and I could visualize the amazed expression of the victim as he saw a revolver suspended in mid-air and pointing at him, and heard a disembodied voice ordering him to throw up his hands. And it was amusing to picture motor cars, apparently empty, threading their way through traffic and stopping and starting at the signals of a visible whistle blown by an invisible traffic officer. Yes, one's imagination could run riot and nothing imagined could equal the reality if my friend's invention came into general use. And, no doubt, I had greatly overestimated the dangers and the undesirable features of the discovery. In all probability the invention, once it became known, would create little more excitement or wonder than had followed the invention of the telephone, the radio or any other epochal thing. People would take it as a matter of course and no greater harm would come of it than had resulted from the discovery of the steam engine, electricity, or any other revolutionary invention, all of which had been looked upon as immodest to the world and to mankind when they had been first announced.

At any rate, I could not afford to worry over Lemuel's affairs even if his marvelous achievement continually occupied my thoughts.

For several days I heard nothing from Dr. Ursinn, and I was far too busy with my own work to visit him. No doubt he was deep in his experiments

and I felt sure he would notify me when he had perfected anything new. And in this I was not mistaken. Answering my telephone, I was greeted by Lemuel's voice.

"I've got it!" he cried. "I've conquered inorganic matter. Everything is perfected! Can you come over at once?"

As on my previous visit, Miguel admitted me, and, as before, he requested me to wait for my friend in the library. But this time I was prepared and had no intention of being either frightened or amazed at anything Dr. Ursinn might spring on me. At least, I thought I was; but I had underestimated my friend's abilities and the astounding possibilities of his perfected discovery.

Standing before the old-fashioned fireplace, and looking intently for the slightest sound which might betray the approach of an invisible being, I peered about the room half expecting to see Lemuel materialize or to hear his bodiless voice speaking to me.

As I did so a thin fog or mist seemed to cloud my vision. I can best describe the sensation as similar to a "blind headache" from which I had at times suffered. I could distinguish every object in the library, but everything appeared to be slightly out of focus. I rubbed my eyes and stared again. In the wall opposite where I stood a luminous spot appeared; other bright spots seemed to take form on the ceiling and the floor and on the other walls. Without doubt, I thought, I was in for a terrific headache, for such bright, luminous spots always appeared before my eyes when such an attack was coming on. And then a strange, a marvelous, an absolutely astounding and terrifying change took place. Floor, ceiling, walls; every object within the room melted away. It was exactly the effect that I had seen when a film or a lantern-slide is melted by the heat of the projection machine. One instant I was standing before the fireplace in Dr. Ursinn's library; the next instant I was in the centre of a blank, standing in a void. To the right, where a wall and two windows had been, was the broad, tree-shaded street with its electric lights and shadowy houses on the farther side. Above me was space; below me intense,athomous blackness. And yet, my feet rested on solid matter and as, too amazed and terrified even to cry out, I felt graspingly with my outstretched hands, my fingers touched the marble and a nearby table with magazines that rustled at my touch. And then, instantly, I knew what had occurred. Incredible, utterly unbelievable as it seemed, I knew that Lemuel by his means, his almost supernatural invention had amused himself and had demonstrated his powers by rendering the entire apartment invisible!

My fright gave way to absolute wonder. It was impossible but true, and feeling confident that I was right, I rather hesitatingly took a step forward. Never shall I forget the sensation. Surrounded by nothingness, as far as my vision went, suspended in mid-air, yet I was walking as securely, as firmly and on as solid a floor as ever. Reassured, I turned towards the street that stretched before me and far beneath me. As if in a dream I walked for-

ward with arms extended, and, the next moment, hanged with uncomfortable force against a solid wall. And at my involuntary expletive, Lemuel's hearty laughter came from behind me, and I staggered back as an invisible hand slapped my shoulders.

"It works!" exclaimed the voice. "It's the most wonderful discovery ever made by man!"

"And the most damnable way to wreck a man's nerves," I blurted out, as my hands came into contact with an invisible chair and I dropped weakly into it.

"Sorry I had to frighten you a bit," said my friend's voice. "But I wanted to test the matter thoroughly."

"If you want to keep my friendship, you'll turn off your confounded machine and get things back to normal," I replied testily.

"Oh, all right," agreed Lemuel, "but look here, old man, can't you wait a minute? I—"

"I'm looking here, there and everywhere," I exclaimed. "And there's nothing to see and I've had enough of this."

"Dash it all, then I done wrong after all," cried Dr. Union. "I felt sure that while subject to the treatment one person could see another, and that while invisible a person could see objects invisible to others. Well, after all, it doesn't matter as much."

"You get things back to visibility again before you start lecturing," I commanded. "It's worse than a nightmare."

Before I had finished speaking I found myself once more amid the familiar surroundings of my friend's library with Lemuel seated, grinning triumphantly, in his favorite chair.

"You didn't give me enough time to test my theories thoroughly," he complained. "I wished to try the glasses again."

"You tested it enough to suit me and more," I said. "I'll take the glasses on your say-so. In fact, from now on, I'll believe anything you say in regard to your discovery or invention or black magic or whatever it is. If you say you can make the entire universe invisible I'll not argue with you. But let me tell you it's lucky you didn't live a century or so ago. You'd be burned for a witch before now."

"You forget that it would be a difficult undertaking to burn an invisible being," he reminded me. "And just think how scared those witch-baiters would have been, if their stake and fire had suddenly vanished from before their eyes."

"And I'll wager that a lot of people will wish you had been executed before you made your devilish discovery," I told him.

"Not a bit of it!" he declared. "The world will welcome it and will acclaim me the greatest inventor and greatest benefactor of the human race."

"See here," I cried, all my old fears again possessing me, "Won't you listen to reason and common sense! You're so carried away with your success that you haven't stopped to think what it would mean, if you let the world know of your invention. No, don't interrupt me, I've worried over this ever since I was here last, and I'm going to

have it out with you here and now. I'll admit you've succeeded better than I expected or hoped, for if you had failed to make inorganic substances invisible your invention might not have been so dangerous. As it is, the possibilities for destroying life, property, society and mankind are too tremendous to even think of. Can't you see what it would mean if crooks got hold of it? Can't you see what it would mean if it fell into the hands of Bolsheviks, or revolutionists or governments? Why man, you'd upset the world, destroy civilization, wreck unspeakable woe and misery and terror."

"Piffle!" ejaculated Lemuel. "If everything and everybody was invisible the status of the world would remain unchanged. How could a criminal attack an invisible victim? Instead of facilitating crime it would deter crime. Instead of bringing on wars and destruction it would prevent such things. How could an army fight an invisible foe? How could a navy attack invisible ships? And invisible police and officers of law and order could apprehend criminals much more readily. Besides, you forget about my glasses. If the public or any part of the public possessed these, nothing would be invisible to the wretches."

"Idiotic reasoning," I declared. "Suppose someone stole or learned your secret? Suppose the agent of a hostile nation got hold of it? Or suppose some gang of criminals secured the invention by fair means or foul? Is it likely that they would let the world know of the glasses which counteract the process? No, every moment that you possess the apparatus for working your devilish trick, you're threatening your fellow men and civilization with annihilation. If you wish to benefit the world, destroy every calculation, every bit of apparatus, every trace of what you've done and never divulge a word of it."

"You're an old scare-head," said Lemuel, though I could see that my words had had their effect. "And," he continued, "I have no intention of following your advice. There is not the slightest danger of my discovery being found out unless you or I divulge it. I shall not,—for the present at least, and I know you will not. Moreover, even if it were known, no one could work it. The procedure is known only to myself."

"Anything one man has done another can repeat," I reminded him.

"Possibly," he admitted, "but to proceed with my statement. I am free to grant that certain things you have said are not without foundation. I had, in the beginning, expected to make my invention public, for of course it is impossible to patent it. Anyone could pirate the patent and, availing himself of his knowledge could render himself invisible and thus beyond reach of the law. But I may decide not to give my discovery to the world at large. It all depends upon future experiments and tests. And, if you really feel as you say in regard to it, you'll help me to carry out my tests. If, in my judgment and in yours, these experiments prove the invention actually a peril to society then, I assure you, it will never be revealed to the public. But, if, on the other hand, you, as well as myself, are convinced that the discovery will be beneficial rather than

inimical, I shall let the world know the secret."

"Hm, well I suppose that's fair enough," I assented. "But before I agree I want to know what these experiments are which you have in mind."

"Certainly," said Lemuel. "I intend to go about while invisible, accompanied by you equipped with the glasses, and from personal observation determine just what will or might happen, and whether the power to become invisible would be beneficial or otherwise."

"I don't see anything to object to in that," I assured him, "and I'll agree to help you, provided you agree not to do anything which might result in my being held responsible. Remember, I will be visible and you will not, and I'd hardly care to stand up in a police court and claim that an invisible companion was responsible for certain acts of which I was accused. No, Lemuel, I have no desire to end my days in an insane asylum."

"But, my dear boy," chuckled my friend, "that would be a splendid test, and of course I could always materialize at the last moment. Just imagine the effect on a policeman or a magistrate!"

"Yes, just imagine it," I replied drily. "And unless you're willing to agree to my terms you can imagine your experiments without my aid."

"You take me far too seriously," exclaimed Lemuel. "I have no intention of overstepping the bounds of the law, and I shall certainly so conduct my experiments that no blame can be attached to you. But," he added regretfully, "it would be much better if you also would submit to the effect of my device."

"Well, I won't and that's an end to that," I declared positively. "And," I continued, "there's another matter. You'll have to promise me that you will not try the experiment of making things invisible by wholesale,—no vanishing of rooms, buildings or other structures while occupied. A terrible panic might and most certainly would result. And this includes trolley cars, railway trains, moving vehicles and similar things. A panic is the nearest thing in the world to start and the hardest to stop."

"I promise," assented my friend, "but I shall most assuredly try my invention on unoccupied structures and other objects."

"I don't care what you try it on provided you do not endanger life or property," I told him.

"Then we'll start our experiment tomorrow," exclaimed Lemuel. "We'll start from your apartment. If convenient to you I'll call at ten tomorrow morning."

#### CHAPTER IV

##### Dr. Unsinn's Experiment

I DO not know exactly what object Dr. Unsinn had in view, or what he hoped to accomplish by his "experiment." Certainly he had demonstrated his discovery and had proved it successful by his tests on myself. Possibly he felt that human sight might vary, that some persons might find him invisible while to others he was visible, or again, he may have wished merely to gratify his own vanity, and enjoy the sensation of moving unseen among his fellows. He could not, in fact, clearly explain

to me what he expected or why he was so insistent upon having me accompany him, when, as we had agreed, we set out from my apartment. But in view of the events which followed I feel sure that it was fate or predestination that led him to undertake his experiment.

Wearing the marvelous glasses, in order that I might not lose sight of my companion, who had rendered himself invisible, I hailed an approaching trolley car. But habit is a strong and persistent thing, and the human mind is greatly governed by the impressions it receives through the eyes, and, at the very outset of our venture I learned this to my chagrin. Boarding the car with Lemuel at my heels, I handed the conductor a dime and he returned a nickel in change. I was on the point of handing it back, and the word "two" was on the tip of my tongue when a nudge from Lemuel's elbow brought me to my senses. As my friend was plainly visible to me I had completely forgotten that he was invisible to the conductor, and I mentally vowed to watch my step more closely in the future. There were few passengers in the car and my companion seated himself in one corner while I took the seat beside him. And presently habit once again came to the fore and came near to getting me into a most embarrassing situation. Quite forgetting, momentarily, that my friend was invisible, I spoke to him, and he, quite in his ordinary manner, replied. In fact we were carrying on quite an animated conversation when I was suddenly brought to a realization of what we were doing by the behavior of the other passengers. Everyone was gazing at me. Some curiously, others half pityingly, as if thinking me either mad or intoxicated, while still others were grinning and thoroughly enjoying the spectacle of a man carrying on a conversation with himself. Even the conductor had entered the car and was staring at me, a strangely puzzled expression on his face, as if undecided whether I was a dangerous lunatic or a common drunk. Fortunately, my presence of mind came to my rescue, and, flushing, but forcing a smile, I turned to an intelligent appearing gentleman near me. "I must apologize for my absent-mindedness," I stammered. "I was merely practicing a bit of ventriloquism for my act, and inadvertently spoke aloud."

This lame explanation appeared to satisfy everyone. The passengers resumed their former occupations of staring vacantly out of the windows, reading their papers, or gazing absently at the advertising placards within the car, while the conductor, evidently relieved, betook himself again to the rear platform.

By now, however, the experiment was getting on my nerves. I had feared that my friend's absent-mindedness might lead him into trouble and yet, by my own thoughtless actions, I had twice within a few moments barely escaped getting into deep water. And the fact that I could not speak my mind to my invisible companion, and that I had pledged myself to see the experiment through, only added to my irritation. As, inwardly fuming, I resolved to keep my mind constantly alert to avoid further embarrassment, the car came to a stop and a stout, pompous and overdressed middle-aged woman en-

tered. As the car started with a jerk she lurched forward, and, before I realized her intention, she plumped herself into the apparently vacant seat beside me. A grunt from my invisible friend, and a terrific shriek from the stout female instantly followed, and, as if bounced from a spring, she sprang up, her eyes blazing, her face white with indignation and fairly shouting a torrent of abuse as she shook her beringed fist in my face.

"Brute! Disreputable old rake!" she screamed, "I'll have you jailed! I'll have you imprisoned!"

Instantly the car was in an uproar. Passengers crowded forward; necks were craned; everyone talked at once, and the conductor pushed his burly figure between the irate female and myself.

"Hey, what's the game?" he demanded. "What did this guy do to you, lady?"

"He intruded himself beneath me,—the unspeakable fiend!" she shrieked. "He endeavored to embrace me and plucked me."

"I did nothing of the sort," I declared, fairly shouting to make myself heard. "I—"

"Tell it to the judge," interrupted the conductor, stepping towards me.

Fortunately for me the gentleman to whom I had offered my ventiloquistic explanation, now intervened in my behalf.

"The lady is mistaken," he declared, rising and restraining the conductor. "I was observing her and this gentleman closely. She sat in the vacant seat and this gentleman did not move. Possibly—"

"Yeah, the old guy's right," chimed in a greasy mechanic opposite. "He never does nethin'. The dame's nutty. What guy'd want her to squat in his lap?"

Instantly the woman's wrath was turned on this new victim, but before violence could be done the conductor intervened. "Hey, quit this roughhouse stuff," he ordered. "If youse want to fight take it outside. Guess you're in wrong, lady. Sit down, or get off and call a cop."

Still glaring and voicing her opinions of everyone, and especially of me, she again descended ponderously to Lemuel's seat.

An involuntary exclamation escaped my lips, but it was uncalculated for. During the excitement, Dr. Uxton had risen and had slipped unseen to the rear platform where he was beckoning to me wildly.

Only too glad to escape, I rose and joined him and, as the car came to a halt, we stepped off.

"Confound the woman!" he exclaimed the moment we were alone. "She very nearly fractured my thighs. You would have gotten us into a nice fix if she had. How could a doctor set an invisible bone? And the apparatus in my pocket might have been ruined so that I could not have regained my visible form. You'd have to be more careful in future. Why didn't you stop her or warn me?"

For an instant I was too amazed at his outburst to speak. So he, too, was blaming me for all the trouble. This was too much.

"Look here!" I cried, "I've had enough of this. You're as well able to take care of yourself while invisible as when visible. If you're going to de-

pend on me to keep you out of trouble I'll quit and you can go ahead with your damnable experiment alone. And you talk about getting into trouble! You're safe and I'm the guest every time. Think it's fun for me to be called names and threatened with arrest? I'd look nice trying to explain matters to the police or the judge, wouldn't I?"

Lemuel chuckled. "Come, come," he exclaimed, placing his hand on my arm. "I didn't mean to have you take it that way, Old Man. But we'll both have to be a trifle more circumspect in future. And, really, it was most amusing. Now I propose taking a taxi hereafter. I am convinced that trolley cars are not suitable conveyances for me in conducting my tests. But the test was most conclusive after all."

By now the humor of the incident had outweighed the more serious side of the affair in my mind, and I laughed heartily with Lemuel as we waited on the corner for an empty taxi to approach.

Within the vehicle we could converse freely, for the noise of the motor and the surrounding traffic prevented the driver from hearing our voices.

Lemuel, elated at the success of his experiments, was now becoming reckless and suggested that it would be most interesting and amusing to render the taxi and ourselves invisible. But I sternly forbade it. "You're as idiot," I declared, "we could be maimed or killed even if we were invisible. Don't you realize we'd be in a wreck within ten seconds? If you make any more such crazy suggestions I'll see that you're placed in a lunatic asylum."

"Faster said than done," he reminded me, "but, all joking aside, I must try the effect on something more than myself. Ah, I have it! Stop the cab, will you?"

As he had been speaking we had passed a huge office building in course of erection, and, as I paid the taxi driver, Lemuel was gazing appreciably at the towering structure of steel and stone.

"A splendid opportunity!" he cried enthusiastically. "Possibly my pocket apparatus may not have sufficient power but—"

"Confound you!" I cried. "Didn't you promise me you wouldn't try your invention on any structure?"

"I did not," he declared decisively. "I merely agreed not to render invisible any structure containing human occupants. This building is vacant. A strike is in progress and the place is deserted."

"Well, you promised not to do anything which would cause a panic or trouble," I persisted.

"And I intend to keep my promise," he replied. "I shall defer my experiment until the noon hour when the streets will be practically deserted, and there can be no panic. And I fail to see how it can cause any trouble."

All arguments which I could offer were in vain, and, I must confess, I was rather fascinated by my friend's suggestion. To cause a towering steel and stone structure to vanish would, indeed, be a feat—if it could be done, and I was rather anxious to find what the effect on the public would be. But as it was still nearly two hours before noon we

resumed our way, with Lemuel seeking new opportunities to test his discovery on the public.

The sidewalks were thronged with shoppers, and presently, as we pushed our way through the crowd, a terrified shriek plucked the hair and sides of the busy street, as my companion, either accidentally or thoughtlessly, bumped into a passing woman. As she collapsed in a faint I sprang forward; but Dr. Unsinn was before me. Completely forgetting that he was invisible, he stooped down, raised the victim's head and then, lifting her in his arms, started for a nearby drug store. Instantly pandemonium broke loose. Screams, shouts, frightened cries rose from the crowd which had quickly gathered, and awe, unable to believe their eyes, men, women and children showed, crowded, and fought to make way for the woman's form floating in air through their midst. For a moment my heart seemed to cease beating. All my fears appeared about to be justified. In an instant there would be a panic with crushed and trampled bodies and all the attendant horrors. But for once the impending catastrophe was stayed by the very panic and terror of the crowd. So intent were the people on the incredible sight which had terrified them that they stood as if turned to stone, petrified with amazement and fear.

And then a still more incredible thing happened. The woman's body suddenly vanished! Lemuel had betthought himself, and, undoubtedly confused at the conditions he had created, had tried to improve matters by rendering his victim invisible. And the seemingly supernatural occurrences had been witnessed by myself as well as by the crowd, for, in the midst the glasses had been wrenched from my nose and were hanging, dangling, useless and temporarily forgotten from my breast pocket. And as the woman's form vanished a strange sound, half sigh, half groan, arose from the gaping multitude. Before hundreds of eyes the impossible had taken place. A woman had faded, without reason or cause she had risen and had floated through the air and had utterly vanished in the midst of the crowd. For an instant they remained spellbound, awed into absolute silence. And in that instant Lemuel had entered the drug store with his burden and had deposited her gently but hurriedly upon a chair, where, as instantaneously as she had vanished, she again resumed her customary form. As every occupant of the shop had rushed to the doors and windows to see what was taking place on the street, nobody noticed the sudden reappearance of the woman. To me it was all nearly as surprising as to the public, but I had sense enough left to hastily don my glasses, as Lemuel slipped past the white-clad employees of the store, and, taking care not to collide with another bystander, rejoined me.

We had no desire to linger and see the results of the affair, and hurried from the crowd and turned into a nearby cross street. I could scarcely blame my friend for what had occurred, for it had been an unavoidable accident, but I did not hesitate to use it as an example of the dire results which might follow if he kept on with his experiment or made his secret public.

Lemuel was, however, far more excited and dis-

turbed than I, and without even attempting to reply he rushed into a subway entrance. Without stopping to think he hurried to the change booth and thrust a quarter under the wicket. Without glancing up, the occupant shoved back five nickels, and my friend gathered them up. But as the coins slid from the wooden shelf and vanished without apparent reason, and with no human hand grasping them, the man peered from his cage. An expression of mortal terror swept across his stolid features, and, with an inarticulate, choking cry, he recoiled backward from his stool. But Lemuel did not stop. The events of the past few minutes had completely upset him, and the scientific mind when upset often becomes panicky. For the moment he had, no doubt, completely forgotten that he was invisible, and, rushing forward, he boarded the train with me at his heels. Fortunately it was a dull hour for the subway—my friend was not forced to jostle or push his way, which most assuredly would have resulted in further troubles—less than half a dozen passengers were within the car which we entered. Lemuel sat silent, evidently composing his thoughts, and fumbling in one of his pockets. The next moment a terrified shout reached through the car; a woman fainted; the guard appeared at the door; there was the hissing of released air, and the train came to a jolting, lurching stop. I had a premonition of what had occurred, and, snatching off the pink glasses, I found my worst fears more than fulfilled. The car and its occupants had completely disappeared! With eyes fairly popping from their sockets, mouths agape, and shaking as if with ague, the guard stood on the platform of the next car, staring, utterly agape, at the void that stretched between him and the car ahead. Reason and instinct told him it was impossible, but his senses told him that a car had completely vanished while speeding at fifty miles an hour, and had taken its passengers along with it. So thoroughly frightened and flustered was the guard that even Lemuel's voice, issuing from space, failed to attract his attention.

"Confound the thing!" exclaimed my companion, "I must have pressed the wrong button, or it may have been shifted when I carried that fainting woman. Likely as not it was injured when that miserable creature sealed herself in my lap. Now—"

"My God, man! Can't you do something?" I cried, victims of the car and its occupants remaining forever invisible floating through my mind.

Then, as instantaneously and unexpectedly as it had vanished, the car was once more in the train. It had all occurred in a few seconds, and the bewildered passengers stared about, rubbing their eyes as if awakening from a dream, while the guard, blinking and muttering, jerked the signal cord and the train again rumbled on.

Fortunately for all concerned, Dr. Unsinn had managed to get his devilish machine to function properly, and no harm had come of the incident, but I had had about enough of it all, and I feared that, at any moment, the apparatus might fail entirely or might do the wrong thing. At the next stop I left the train, forcing my friend along with me, and, dragging him into an obscure corner of



the station platform where there was no chance of being overheard, I expressed my view of his experiment in no-gentle terms.

"You can't expect a delicate device to withstand two hundred and fifty pounds of feminine flesh and bone, can you?" he demanded. "I'm not surprised that it was temporarily disarranged. But it's entirely right now. If you don't believe it I'll demonstrate it right here."

"Don't you dare!" I exclaimed. "You'll resume your normal form as a demonstration, and we'll go to lunch. Then back to my apartments and no more of this experiment. You've caused enough trouble for one day and I'll have a nervous breakdown if this sort of thing continues."

"I'll agree on one condition," replied Lemuel with more readiness than I had expected. "I'm determined to try my experiment on that unfinished building. After that I'll cease my experiment for today."

In vain I argued. Lemuel could be as obstinate as a mule at times, and, at last, realizing that he was bound to carry out his desires and that if I left him he might bring about dire results when alone, I assented to his condition.

So, with Dr. Unclun once more his nasal self, we found a quiet restaurant where I was accustomed to dining. The waiter, having taken our order, handed me a copy of the latest edition of a paper, and, half fearfully, I glanced through it, expecting to find an account of one or more of the strange occurrences for which we had been responsible. But nothing had appeared, and I decided that, in all probability, the witnesses had not cared to report an experience which would expose them to ridicule and a suspicion of insanity.

Lemuel was in high spirits. To be sure, he had made one or two mistakes, but, in each case, as he took care to point out to me, his errors had, as he put it, added to the value of his experiment and of his observations. And he could not resist crowing over me a bit when he called my attention to the fact that neither panic nor disasters had resulted.

"It is exactly as I forecast," he declared. "The entirely new and unknown does not terrorize human beings. Wonder and amusement temporarily paralyze the muscles, and, as you should know, two opposed impressions cannot occupy the mind at the same time. Hence fear cannot have a place where wonder is predominant.

"No, my friend, your fears of my discovery creating a panic or causing terror and shock are absolutely unfounded."

"You forget about the woman who fainted, and the man in the subway," I reminded him.

"Utterly beside the question," he asserted. "In the case of the woman it was bodily contact which frightened her, and, in the other case, the fact that the money vanished. In neither case was it due to fright at my invisibility."

"It's hopeless to argue with you," I said. "Indirectly, your invisibility was at the bottom of it, and Heaven alone knows what a panic might have resulted if that car had remained invisible long

enough for the passengers of the other cars to have investigated the cause of the train stopping."

"I can and shall prove I am right," he declared. "Come, we'll have a try at that building and I'll wager no one will be terrified."

"For Heaven's sake, don't vanish here!" I cried, as I saw Lemuel reach towards an inner pocket. "Wait until we are alone. I'd suggest a telephone booth as the most convenient and safest spot."

A few moments later my friend entered a booth, and almost instantly emerged, visible only to myself. Hailing a taxi, we were soon in the vicinity of the partly completed Hartwell Building. It was the lunch hour and very few persons were on the street. Opposite the building a chauffeur dazed in his taxi, two fruit vendors argued in vociferous Italian on the corner, and a few pedestrians who had dined early were wandering about gazing into shop windows. Entering the main doorway of the building we found ourselves in the spacious rotunda with its litter of discarded building materials and abandoned scaffoldings.

"Ah, here we are!" exclaimed Lemuel gleefully. "Now, if my pocket apparatus can produce results on this edifice I shall feel that nothing so too great to be rendered invisible. Notice artists, natives, citizens, yes—"

"Then I hope it doesn't work," I interrupted.

But my hopes were in vain. As Lemuel had been speaking, he had adjusted his instrument and scarcely had my last word been uttered, when the twenty stories of concrete, steel and stone dissolved about us, leaving us, invisible to others, standing in air above the yawning abyss of the foundation excavation.

For a brief instant no one within sight appeared to notice that the structure had vanished. Then the dozing chauffeur jerked upright, his jaw agape, and with a wild yell he set transfixed, pointing dramatically at the empty lot where the building had stood. At his cry everyone on the street turned. Shouts and exclamations drew occupants of stores and restaurants on the run. With screeching horns taxis came tearing into the street, and in almost no time Nineteenth Street was filled with a gaping, gesticulating, excited crowd.

"Didn't I tell you so?" cried Lemuel triumphantly. "No one is frightened. All—" His words were cut short by the clanging of a bell as a patrol wagon came dashing around a corner, while from the opposite direction, the screaming siren of a fire truck added to the uproar.

"Quick!" I cried. "Someone's called the police and turned in a fire alarm. In a minute they'll be here. They'll find us and there'll be the devil to pay!"

Lemuel roared with glee. "You forget we're invisible!" he reminded me. "And it will be highly amusing to witness the reactions of the police and firemen when they find solid walls where obviously there are none. And imagine the results when those who succeed in entering vanish instantly."

"Turn off the damnable machine instantly," I commanded him, "this has gone far enough."

The police and firemen were advancing towards us, hesitatingly but determined, although what they

expected to accomplish or why they imagined their services were required, is still a mystery to me. As I have said before, habit is one of the strongest of influences. Dr. Usania, being a great respecter of law, and seeing the police approaching, succumbed to force of habit and almost involuntarily stopped his mechanism. Instantly the huge building once more towered above the street, and with a hoarse cry of warning and alarm, the crowd broke and fled, seeking refuge in doorways and stores as if fearing the structure might crash thundering into the street. Even the police sprang back, but the firemen, to their credit be it said, stood their ground, and, thinking something was expected of them, turned half a dozen streams of water on the building. In the confusion Lemuel and I slipped unseen from a rear entrance and hurried from sight around a corner.

Despite all my experiences with my friend's discovery I was shaken and upset by this latest demonstration of his power, and even Lemuel was, I could see, in a highly excitable frame of mind. His device had exceeded even his most sanguine expectations and his experiment had, from his point of view, been a huge success.

Several times he started to speak, but each time I checked him, for the sidewalks were thronged with pedestrians and I had no desire to have attention turned towards us after our latest achievement.

We were now in a shopping district, and as we walked along, picking our way with care in order that Lemuel might not jostle some passer-by, I noticed a rough-looking, heavily-built fellow loitering near the edge of the sidewalk and furtively glancing at each woman who passed him. Suddenly he darted forward, snatched a handbag from a stylishly-dressed girl, and dashed up the street. Screaming that she had been robbed, the girl started after him. Cries of "Stop thief!" resounded from every side, and a score of persons turned and gave chase. Lemuel and I had been nearest to the fellow, and with one accord we were after him, quite forgetting that one of us was invisible. Dashing around a corner, the crowd entered an almost deserted side street with us at its heels and the howling mob half a block in the rear. In my youth I had been something of a runner, and Lemuel had, it flashed over me, won the coveted "S" of our university as a sprinter. Rapidly we gained upon the fellow, and, as he turned to dash into an alleyway, Lemuel grasped him by the coat with a command to halt.

Instantly, and without stopping, the fellow half turned and dealt a vicious, back-handed blow with his doubled fist. It caught Lemuel full in the face, and with a gasping cry he staggered back into my arms with a two inch gash laying bare the cheek bone and blood gushing from the wound. But even at that moment, while supporting my injured comrade, my attention was focused upon the ruffian who had struck him down. Feeling the impact of his fist upon a fellow-being's flesh, he had whined, and, the next moment, stood rooted to the spot.

Instead of a form stretched on the pavement or a

battered man staggering back, not a living soul was near with the exception of myself. The fellow's eyes grew wide, his mouth opened, and the next moment he uttered a terrified scream, and dropping the hand-bag fell to his knees, covering his eyes with his hands, babbling incoherently, and shaking with mortal fear. Upon the flapping before me was a blotch of blood, and, from nowhere, drops of blood were slowly adding to the crimson pool. Lemuel might be invisible but the blood from his wound was not. To the cowering, superstitious wretch, the blood, slowly dripping from an unseen victim, must have been a most awful and terrifying sight.

The oncoming mob now was nearly upon us, and a dozen fears swept through my confused brain. What if the blood stains on the pavement attracted attention and an explanation were demanded? What would happen to my invisible companion, as the mob, dashing onward, bore him down and trampled him under foot? And what if the cowering wretch before us blurted out the truth? But I need not have worried. So intent were the man-chasers upon their quarry that they gave no heed even to me, and in a moment, the red blotch was completely obliterated by scores of feet, as the crowd surrounded us and seized the thief who offered no resistance. And almost by a miracle Dr. Usania escaped the fate I had feared. I sprang behind him as the mob reached us and thus partially shielded him, but despite this, the shouting, pushing, perspiring crowd jostled and humped him, tearing his coat half from his shoulders, knocking his spectacles into the street where they were instantly ground to bits underfoot, tearing his collar away, knocking off his hat and, as I knew from his half-stifled grunts, exclamations and ejaculations, giving him many a painful jab and bump with elbows and shoulders. But in that hub-bub, the cries of any one man were inaudible, and as everyone jostled and pushed his neighbor no one noticed that an invisible but solid human form was in their midst. Luckily the mob surged forward around the thief and left a fairly clear space through which I half-dragged, half-pushed my battered, bruised and dishevelled comrade.

Attracted by the commotion, half a dozen taxis had drawn up to the curb, their drivers craning their necks and peering into the milling crowd about the captive, and giving no heed to anything else. Quickly opening the door of the nearest, I bundled Lemuel inside, and, at last succeeding in gaining the chauffeur's attention, I ordered him to drive off. He turned with a half-uttered oath and refused to move, but noticing my own rumpled appearance, and realizing I had been in the thick of the trouble, his tone changed and he asked what it was all about. In a few words I explained that it was merely a purse-snatcher, and that I had been knocked over in the mêlée. For an instant he gazed suspiciously at me, for my hands were a bit smeared with Lemuel's blood, and for a brief instant I trembled for fear he would drive us to the nearest police station. But he had lost interest in the crowd and excitement, and as I suggestively showed

(Continued on page 969)

# The FIRST MEN in the MOON

By H.G. Wells

Author of "The Crystal Egg," "The Island of Dr. Moreau," etc.



"This apparatus seemed only reasonably large and near to us, and then I saw how exceedingly little the Salutation upon it seemed, and I realized the full immensity of caverns and machines. It was old and new!"

## What Went Before

**B**EDFORD is a writer, but he also has insisted confidence in his abilities as a first-rate business man. Because of some business reverses, he has gone off to a very secluded spot to write a play and so make up some of his financial losses. But even there he cannot work undisturbed, for every day at the same hour, a Mr. Cavor passes by his house, steps, makes some humming sounds, clings awhile, looks at his watch, and returns to his own home. Bedford talks to him and stops this annoying procedure, but the cessation makes it impossible for Cavor to continue with his work. He mentions this fact to Bedford, and in the course of the conversation, new plans and ideas are developed. Mr. Cavor is a scientist and just now is working on a new invention, which he calls Cavorite and which is supposed to be opaque to gravitation—cutting off bodies from gravitating to each other.

Bedford becomes enthusiastic and sees great commercial possibilities for Cavorite and agrees to drop his writing and become "business manager" for Cavor and Cavorite.

Soon Cavor accidentally succeeds in his experi-

ments and the accident causes some thousands of dollars in damages to surrounding buildings and both their homes and almost cost them their lives. But though the discovery proves so nearly disastrous, Cavor gets a new inspiration and he starts work on his new idea immediately. He builds a space flyer, which proves to be a perfect conveyance for interplanetary travel. They go off to the moon, provisioned with plenty of condensed food and other necessary comforts for a long trip. They arrive on the moon without any mishap, just before the Lunar dawn. Soon after they land, the black and white of the scenery disappear. The glare of the sun takes on a faint tinge of amber and the shadows are deep purple and to the westward the sky is blue and clear, and the arctic appearance is gone. Then an atmosphere rose about them, but still it seemed like a lifeless world. And then, suddenly, they saw movement—little coal bodies that looked like pebbles, bursting open one by one—and in a short time, the whole slope was dotted with small plants, growing quickly into huge spikes and fleshy vegetation.

## THE FIRST MEN IN THE MOON

By H. G. WELLS

### PART II

#### CHAPTER IX

##### Prospecting Begins

**H**E ceased to gaze. We turned to each other, the same thought, the same question in our eyes. For these plants to grow, there must be some air, however attenuated, air that we also should be able to breathe.

"The manhole?" I said.

"Yes!" said Cavor, "if it is air we see!"

"In a little while," I

said, "these plants will be as high as we are. Suppose—suppose after all—is it certain? How do you know that stuff is air? It may be nitrogen—it may be carbonic acid gas, even!"

"That is easy," he said, and set about proving it. He produced a big piece of crumpled paper from the hole, lit it, and thrust it hastily through the manhole valve. I bent forward and peered down through the thick glass for its appearance outside, that little flame on whose evidence depended so much!

I saw the paper drop out and lie lightly upon the snow. The pink flame of its burning vanished. For an instant it seemed to be extinguished. And then

I saw a little blue tongue upon the edge of it that trembled, and crept, and spread!

Quietly the whole sheet, save where it lay in immediate contact with the snow, charred and shrivelled and sent up a quivering thread of smoke. There was no doubt left to me; the atmosphere of the moon was either pure oxygen or air, and capable therefore—unless its beauty was deceptive—of supporting our alien life. We might emerge—and live!

I sat down with my legs on either side of the

manhole and prepared to unscrew it, but Cavor stopped me. "There is first a little precaution," he said. He pointed out that although there was certainly an oxygenated atmosphere outside, it might still be so riddled as to cause us grave injury. He reminded me of mountain sickness, and of the bleeding that often afflicts aeronauts who have ascended too swiftly, and he spent some time in the preparation of a

sickly-tasting drink which he insisted on my sharing. It made me feel a little numb, but otherwise had no effect on me. Then he permitted me to begin unscrewing.

Presently the glass stopper of the manhole was up far enough that the denser air within our sphere

*IN the first installment of this story we left our adventurers just as they had landed on the moon. Grotzgar as the adventures carry upon the landing, they are as anxious compared to what is in store for our travelers when they meet the inhabitants of the Moon. Nothing more grotzgar, nothing more impossible, probably, has ever been written, since the advent of the Moon palace of the Lunarians as contained in this installment it is impossible in its daring and breadth, yet it is not at all impossible, perhaps not even impossible. If, as we know, it is impossible for creatures to come about the Moon, due to its lack of atmosphere, and if there is an atmosphere within the Moon, then creatures of the kind that Mr. Wells paints so vividly in this story might well be expected to be seen there, if explorers ever land upon that satellite.*

began to escape along the thread of the screw, slinging as a bottle sings before it boils. Thereupon he made me desist. It speedily became evident that the pressure outside was very much less than it was within. How much less it was we had no means of telling.

I sat grasping the stopper with both hands, ready to close it again if, in spite of our intense hope, the lunar atmosphere should after all prove too rarefied for us, and Cavor sat with a cylinder of compressed oxygen at hand to restore our pressure. We looked at one another in silence, and then at the fantastic vegetation that swayed and grew vibrantly and noiselessly without. And ever that shrill piping continued.

My blood-vessels began to throb in my ears, and the sound of Cavor's movements diminished. I noted how still everything had become, because of the thinning of the air.

As our air leaked out from the screw the moisture of it condensed in little puffs.

Presently I experienced a peculiar shortness of breath that lasted indeed during the whole of the time of our exposure to the moon's exterior atmosphere, and a rather unpleasant sensation about the ears and finger-nails and the back of the throat grew upon my attention, and presently passed off again.

But then came vertigo and nausea that abruptly changed the quality of my courage. I gave the lid of the manhole half a turn and made a hasty explanation to Cavor; but now he was the more sanguine. He answered me in a voice that seemed extraordinarily small and remote, because of the thinness of the air that carried the sound. He recommended a nip of brandy, and set me the example, and presently I felt better. I turned the manhole stopper back again. The throbbing in my ears grew louder, and then I remarked that the piping note of the outrush had ceased. For a time I could not be sure that it had ceased.

"Well!" said Cavor, in the ghost of a voice.

"Well?" said I.

"Shall we go on?"

I thought. "Is this all?"

"If you can stand it," he said.

By way of answer I went on unscrewing. I lifted the circular operculum from its place and held it carefully on the bale. A flake or so of snow whirled and vanished as that thin and unfamiliar air took possession of our sphere. I knelt, and then seated myself at the edge of the manhole, peering over it. Beneath, within a yard of my face, lay the untroubled snow of the moon.

There came a little pause. Our eyes met.

"It doesn't distress your lungs too much?" said Cavor.

"No," I said. "I can stand this."

He stretched out his hand for his blanket, thrust his head through its central hole, and wrapped it about him. He sat down on the edge of the manhole, he let his feet drop until they were within six inches of the lunar ground. He hesitated for a moment, then thrust himself forward, dropped these intervening inches, and stood upon the untroubled soil of the moon.

As he stepped forward he was refracted grotesquely by the edge of the glass. He stood for a moment looking this way and that. Then he drew himself together and kept.

The glass distorted everything, but it seemed to me even then to be an extremely big leap. He had at one bound become remote. He seemed twenty or thirty feet off. He was standing high upon a rocky mass and gesticulating back to me. Perhaps he was shouting—but the sound did not reach me. But how the dance had he done this? I felt like a man who has just seen a new conjuring trick.

In a puzzled state of mind I too dropped through the manhole. I stood up. Just in front of me the snow-drift had fallen away and made a sort of ditch. I made a step and jumped.

I found myself flying through the air, saw the rock on which he stood coming to meet me, alighted it and clung in a state of infinite amazement.

I gasped a painful laugh. I was tremendously confused. Cavor bent down and shouted in piping tones for me to be careful.

I had forgotten that on the moon, with only an eightieth part of the earth's mass and a quarter of its diameter, my weight was barely a sixth what it was on earth. But now that fact insisted on being remembered.

"We are out of Mother Earth's holding-strings now," he said.

With a guarded effort I raised myself to the top, and moving as cautiously as a rheumatic patient, stood up beside him under the blaze of the sun. The sphere lay behind us on its dwindling snow-drift thirty feet away.

As far as the eye could see over the enormous disorder of rocks that formed the crater floor, the same bristling scrub that surrounded us was starting into life, diversified here and there by bulging masses of a cactus form, and scarlet and purple lichens that grew so fast they seemed to crawl over the rocks. The whole area of the crater seemed to me then to be one similar wilderness up to the very feet of the surrounding cliff.

This cliff was apparently bare of vegetation save at its base, and with buttresses and terraces and platforms that did not very greatly attract our attention at the time. It was many miles away from us in every direction, we seemed to be almost at the centre of the crater, and we saw it through a certain haziness that drove before the wind. For there was even a wind now in the thin air, a swift yet weak wind that chilled exceedingly but exerted little pressure. It was blowing round the crater, as it seemed, to the hot illuminated side from the foggy darkness under the upward wall. It was difficult to look into this outward fog; we had to peer with half-closed eyes beneath the shade of our hands, because of the fierce intensity of the motionless sun.

"It seems to be deserted," said Cavor, "absolutely desolate."

I looked about me again. I retained even then a clinging hope of some quasi-human evidence, some pinnacle or building, some house or engine, but everywhere one looked spread the tumbled rocks in peaks and craters and the darling scrub and these

bulging eusts that swelled and swelled, a flat negation as it seemed of all such hope.

"It looks as though these plants had it to themselves," I said. "I see no trace of any other creature."

"No insects—no birds—no! Not a trace, not a scrap nor particle of animal life. If there was—what would they do in the night? . . . No; there's just these plants alone."

I shaded my eyes with my hand. "It's like the landscape of a dream. These things are less like earthly land plants than the things one imagines among the rocks at the bottom of the sea. Look at that yonder! One might imagine it a lizard changed into a plant. And the glare?"

"This is only the fresh morning," said Cavor.

He sighed and looked about him. "This is no world for men," he said. "And yet in a way—it appeals."

He became silent for a time, then commenced his meditative humming.

I started at a gentle touch, and found a thin sheet of livid lichen leaping over my shoe. I kicked at it and it fell to powder, and each speck began to grow.

I heard Cavor exclaim sharply, and perceived that one of the fine bayonets of the scrub had pricked him.

He hesitated, his eyes sought among the rocks about us. A sudden blaze of pink had crept up a ragged pillar of crag. It was a most extraordinary pink, a livid magenta.

"Look!" said I, turning, and behold, Cavor had vanished.

For an instant I stood transfixed. Then I made a hasty step to look over the verge of the rock. But in my surprise at his disappearance I forgot once more that we were on the moon. The thrust of my foot that I made in striding would have carried me a yard on earth; on the moon it carried me six—a good five yards over the edge. For the moment the thing had something of the effect of those night, mares when one falls and falls. For while one falls sixteen feet in the first second of a fall on earth, on the moon one falls two, and with only a sixth of one's weight. I fell, or rather I jumped down, about ten yards I suppose. It seemed to take quite a long time, five or six seconds, I should think. I floated through the air and fell like a feather, loose deep in a snow-drift in the bottom of a gully of blue-gray, white-veined rock.

I looked about me. "Cavor?" I cried; but no Cavor was visible.

"Cavor?" I cried louder, and the rocks echoed me. "I turned fiercely to the rocks and clambered to the summit of them. "Cavor?" I cried. My voice sounded like the voice of a lost lamb.

The sphere, too, was not in sight, and for a moment a horrible feeling of desolation pinched my heart.

Then I saw him. He was laughing and gesticulating to attract my attention. He was on a bare patch of rock twenty or thirty yards away. I could not hear his voice, but "jump" said his gestures. I hesitated, the distance seemed enormous. Yet I

reflected that surely I must be able to clear a greater distance than Cavor.

I made a stop back, gathered myself together, and kept with all my might. I seemed to shoot right up in the air as though I should never come down. . . .

It was horrible and delightful, and as wild as a nightmare, to be flying off in this fashion. I realized my leap had been altogether too violent. I flew clean over Cavor's head and beheld a spiky confusion in a gully spreading to meet my fall. I gave a yelp of alarm. I put out my hands and straightened my legs.

I hit a huge fungoid bulk that burst all about me, scattering a mass of orange spores in every direction, and covering me with orange powder. I rolled over spluttering, and came to rest convulsed with breathless laughter.

I became aware of Cavor's little round face peering over a leafing hedge. He shouted some faded inquiry. "Eh?" I tried to shout, but could not do so far want of breath. He made his way towards me, coming gingerly among the bushes.

"We've got to be careful," he said. "This moon has no discipline. She'll let us smash ourselves."

He helped me to my feet. "You exerted yourself too much," he said, dabbing at the yellow stuff with his hand to remove it from my garments.

I stood passive and panting, allowing him to beat off the spores from my knees and elbows and lecture me upon my misfortune. "We don't quite allow for the gravitation. Our muscles are scarcely educated yet. We must practise a little, when you have got your breath."

I pulled two or three little thorns out of my hand, and sat for a time on a boulder of rock. My muscles were quivering, and I had that feeling of partial disillusionment that comes at the first fall to the learner of cycling on earth.

It suddenly occurred to Cavor that the cold air in the gully, after the brightness of the sun, might give me a fever. So we clambered back into the sunlight. We found that beyond a few abrasions I had received no serious injuries from my tumble, and at Cavor's suggestion we were presently looking round for some safe and easy landing-place for my next leap. We chose a rocky slab some ten yards off, separated from us by a little thicket of olive-green spines.

"Imagine it there!" said Cavor, who was assembling the air of a trainer, and he pointed to a spot about four feet from my toes. This leap I managed without difficulty, and I must confess I found a certain satisfaction in Cavor's falling short by a foot or so and tasting the spikes of the scrub. "One has to be careful, you see," he said, pulling out his thorns, and with that he ceased to be my mentor and became my fellow-learner in the art of lunar locomotion.

We chose a still easier jump and did it without difficulty, and then kept back again, and to and fro several times, accustoming our muscles to the new standard. I could never have believed had I not experienced it, how rapid that adaptation would be. In a very little time indeed, certainly after fewer than thirty leaps, we could judge the

effort necessary for a distance with almost terrestrial assistance.

And all this time the lunar plants were growing around us, higher and denser and more entangled, every moment thicker and taller, spiked plants, green cactus masses, fungi, fleshy and lichenous things, strangest reds and sinuous shapes. But we were so intent upon our longing, that for a time we gave no heed to their unflinching expansion.

An extraordinary elation had taken possession of us. Partly, I think, it was our sense of release from the confinement of the sphere. Mainly, however, the thin sweetness of the air, which I am certain contained a much larger proportion of oxygen than our terrestrial atmosphere. In spite of the strange quality of all about us, I felt as adventurous and experimental as a cockney would do placed for the first time among mountains; and I do not think it occurred to either of us, face to face though we were with the unknown, to be very greatly afraid.

We were bitten by a spirit of enterprise. We selected a lichenous boppe perhaps fifteen yards away, and landed neatly on its summit one after the other. "Good!" we cried to each other; "good!" and Cover made three steps and went off to a tempting slope of snow a good twenty yards and more beyond. I stood for a moment struck by the grotesque effect of his scaring figure—his dirty cricket cap, and spiky hair, his little round body, his arms and his knackerbockered legs tucked up tightly—against the weird splendours of the lunar scene. A gust of laughter seized me, and then I stopped off to follow. Plump! I dropped beside him.

We made a few Gargantuan strides, leapt three or four times more, and set down at last in a lichenous hollow. Our lungs were painful. We sat holding our sides and recovering our breath, looking appreciation at one another. Cover panted something about "amazing sensations." And then came a thought into my head. For the moment it did not seem a particularly appalling thought, simply a natural question arising out of the situation.

"By the way," I said, "where exactly is the sphere?"

Cover looked at me. "Eh?"

The full meaning of what we were saying struck me sharply.

"Cover?" I cried, laying a hand on his arm, "where is the sphere?"

## CHAPTER X

### Lost Men in the Moon

His face caught something of my dismay. He stood up and stared about him at the scrub that fenced us in and rose about us, stretching upward in a passion of growth. He put a dubious hand to his lips. He spoke with a sudden lack of assurance. "I think," he said slowly, "we left it . . . somewhere . . . about there."

He pointed a hesitating finger that wavered in an arc.

"I'm not sure." His look of consternation

deepened. "Anyhow," he said, with his eyes on me, "it can't be far."

We had both stood up. We made unmeaning speculations, our eyes sought in the twining, thickening jungle round about us.

All about us on the sunlit slopes frothed and swayed the darting shrubs, the swelling cactus, the creeping lichens, and wherever the shade remained the snowdrifts lingered. North, south, east and west spread an identical monotony of unfamiliar forms. And somewhere, buried among this tangled confusion, was our sphere, our home, our only provision, our only hope of escape from this fantastic wilderness of ephemeral growths into which we had come.

"I think, after all," he said, pointing suddenly, "it might be over there."

"No," I said. "We have turned in a curve. See? here is the mark of my heels. It's clear the thing must be more to the eastward, much more. No!—the sphere must be over there."

"I think" said Cover, "I kept the sun upon my right all the time."

"Every leap, it seems to me," I said, "my shadow flew before me."

We stared into one another's eyes. The area of the crater had become enormously vast to our imaginations, the growing thickets already impenetrably dense.

"Good heavens! What fools we have been!"

"It's evident that we must find it again," said Cover, "and that soon. The sun grows stronger. We should be fainting with the heat already if it wasn't so dry. And . . . I'm hungry."

I stared at him. I had not suspected this aspect of the matter before. But it came to me at once—a positive craving. "Yes," I said with emphasis. "I am hungry too."

He stood up with a look of active resolution. "Certainly we must find the sphere."

As calmly as possible we surveyed the interminable reefs and thickets that formed the floor of the crater, each of us weighing in advance the chances of our finding the sphere before we were overtaken by heat and hunger.

"It can't be fifty yards from here," said Cover, with indecisive gestures. "The only thing is to heat round about until we come upon it."

"That is all we can do," I said, without any ability to begin our hunt. "I wish this confounded sphere hush did not grow so fast!"

"That's just it," said Cover. "But it was lying on a bank of snow."

I stared about me in the vain hope of recognising some knoll or shrub that had been near the sphere. But everywhere was a confusing sameness, everywhere the aspiring bushes, the distending fungi, the dwindling snow banks, steadily and inevitably changed. The sun scorched and stung, and faintness of an unaccountable hunger mingled with our infinite perplexity. And even as we stood there, confused and lost amidst unprecedented things, we became aware for the first time of a sound upon the moon other than the stir of the growing plants, the faint sighing of the wind, or those that we ourselves had made.

Boom. . . Boom. . . Boom. . .

It came from beneath our feet, a sound in the earth. We seemed to hear it with our feet as much as with our ears. Its dull resonance was muffled by distance, thick with the quality of intervening substance. No sound that I can imagine could have sounded so mere, or have changed more completely the quality of things about us. For this sound, rich, slow, and deliberate, seemed to us as though it could be nothing but the striking of some gigantic buried clock.

Boom. . . Boom. . . Boom. . .

Sound suggestive of still chambers, of sleepless nights in crowded cities, of vigils and the awaited hour, of all that is orderly and methodical in life, beaming out pregnant and mysterious in this fantastic desert! To the eye everything was unchanged: the desolation of bushes and cacti waving silently in the wind, stretched unbroken to the distant cliffs, the still dark sky was empty overhead, and the hot sun hung and burned. And through it all, a warning, a threat, throbbled this enigma of sound.

Boom. . . Boom. . . Boom. . .

We questioned one another in faint and faded voices. "A clock?"

"Like a clock!"

"What is it?"

"What can it be?"

"Count," was Cavor's belated suggestion, and at that word the striking ceased.

The silence, the rhythmic disappointment of the silence, came as a fresh shock. For a moment one could doubt whether one had ever heard a sound. Or whether it might not still be going on. Had I indeed heard a sound?

I felt the pressure of Cavor's hand upon my arm. He spoke in an undertone, as though he feared to wake some sleeping thing. "Let us keep together," he whispered, "and look for the sphere. We must get back to the sphere. This is beyond our understanding."

"Which way shall we go?"

He hesitated. An intense persuasion of presences, of unseen things about us and near us, dominated our minds. What could they be? Where could they be? Was this arid desolation, alternately frozen and scorched, only the outer rind and mask of some subterranean world? And if so, what sort of world? What sort of inhabitants might it not presently discharge upon us?

And then, stabbing the aching stillness as vivid and sudden as an unexpected thunderclap, came a clang and rattle as though great gates of metal had suddenly been flung apart.

It arrested our steps. We stood gaping helplessly. Then Cavor stole towards me.

"I do not understand!" he whispered close to my face. He waved his hand vaguely skyward, the vague suggestion of still vaguer thoughts.

"A hiding-place! If anything came. . ."

I looked about us. I nodded my head in assent to him.

We started off, moving stealthily with the most exaggerated precautions against noise. We went towards a thicket of scrub. A clangour, like ham-

mers being about a boiler, hastened our steps. "We must crawl," whispered Cavor.

The lower leaves of the bayonet plants, already overshadowed by the newer coat above, were beginning to wither and shrivel as that we could thrust our way in among the thickening stems without serious injury. A stab in the face or arm we did not heed. At the heart of the thicket I stopped, and stared pasting into Cavor's face.

"Subterranean," he whispered. "Below."

"They may come out."

"We must find the sphere!"

"Yes," I said; "but how?"

"Crawl till we come to it."

"But if we don't?"

"Keep hidden. See what they are like."

"We will keep together," said I.

He thought. "Which way shall we go?"

"We must take our chance."

We peered this way and that. Then very circumspectly, we began to crawl through the lower jungle, making, so far as we could judge, a circuit, halting now at every waving fungus, at every sound, intent only on the sphere from which we had so foolishly emerged. Ever and again from out of the earth beneath us came concussion, beatings, strange, inexplicable mechanical sounds; and once, and then again, we thought we heard something, a faint rattle and tumb, borne to us through the air. But fearful as we were we dared essay no vantage-point to survey the crater. For long we saw nothing of the beings whose sounds were so abundant and insistent. But for the faintness of our hunger and the drying of our throats that crawling would have had the quality of a very vivid dream. It was so absolutely unreal. The only element with any touch of reality was these sounds.

Figure it to yourself! About us the dream-like jungle, with the silent bayonet leaves darting overhead, and the silent, vivid, sun-splashed lichens under our hands and knees, waving with the vigour of their growth as a carpet waves when the wind gets beneath it. Ever and again one of the bladder fungi, bulging and distending under the sun, loomed upon us. Ever and again some novel shape in vivid colour abtruded. The very cells that built up those plants were as large as my thumb, like heads of coloured glass. And all these things were saturated in the unmitigated glare of the sun, were seen against a sky that was bluish black and speckled still, in spite of the sunlight, with a few surviving stars. Strange! the very forms and texture of the stones were strange. It was all strange, the feeling of one's body was unprecedented, every other movement ended in a surprise. The breath sucked this in one's throat, the blood flowed through one's ears in a thrashing tide—thud, thud, thud, thud. . .

And over and again came gusts of tumult, hammering, the clanging and throb of machinery, and grunting—the howling of great beasts!

## CHAPTER XI

### The Mooncalf Postures

SO we two poor terrestrial castaways, lost in that wild-growing moon jungle, crawled in terror before the sounds that had come upon



us. We crawled, as it seemed, a long time before we saw either Selenite or mooncalf, though we heard the howling and grunting noises of these latter continually drawing nearer to us. We crawled through many ravines, over snow slopes, amidst fungi that ripped like thin blades at our thrust, emitting a watery humour, over a perfect pavement of things like puff-balls, and beneath interminable thickness of scrub. And ever more hopefully our eyes sought for our abandoned sphere. The noise of the mooncalves would at times be a vast flat snail-like sound, at times it rose to an amazed and wrathful howling, and again it would become a clogged bestial sound as though these unseen creatures had sought to cut and bellow at the same time.

Our first view was but an inadequate transitory glimpse, yet none the less disturbing because it was incomplete. Cavor was crawling in front at the time, and he was first to become aware of their proximity. He stopped dead, arresting me with a single gesture.

A crackling and smashing of the scrub appeared to be advancing directly upon us, and then, as we squatted close and endeavoured to judge of the nearness and direction of this noise, there came a terrific bellow behind us, so close and vehement that the tops of the bayonet scrub bent before it, and one felt the breath of it hot and moist. And, turning about, we saw indistinctly through a crowd of swaying stems the mooncalf's shining sides, and the long line of its back loomed out against the sky.

Of course it is hard for me now to say how much I saw at that time, because my impressions were corrected by subsequent observation. First of all impressions was its enormous size; the girth of its body was some fourscore feet, its length perhaps two hundred. Its sides rose and fell, with its laboured breathing. I perceived that its gigantic, fleshy body lay along the ground, and that its skin was of a corrugated white, dappling into blackness along the backbones. But of its feet we saw nothing. I think also that we saw then the profile at least of the almost brainless head, with its fat-cumbersome neck, its slabbering omnivorous mouth, its little nostrils, and tight shut eyes. (For the mooncalf invariably shuts its eyes in the presence of the sun.) We had a glimpse of a vast red pit as it opened its mouth to bleat and bellow again; we had a breath from the pit, and then the monster heeled over like a ship, dragged forward along the ground, crossing all its leathery skin, rolled again, and so wallowed past us, smashing a path amidst the scrub, and was speedily hidden from our eyes by the dense interlacings beyond. Another appeared more distinctly, and then another, and then, as though he was guiding these animated lumps of provender to their pasture, a Selenite came momentarily into ken. My grip upon Cavor's foot became convulsive at the sight of him, and we remained motionless and peering long after he had passed out of our range.

By contrast with the mooncalves he seemed a trivial being, a mere ant, scarcely five feet high. He was wearing garments of some leathery substance, so that no portion of his actual body appeared, but of this, of course, we were entirely

ignorant. He presented himself, therefore, as a compact, bristling creature, having much of the quality of a complicated insect, with whip-like tentacles and a dangling arm projecting from his shining cylindrical body case. The form of his head was hidden by his enormous many-spiked helmet—we discovered afterwards that he used the spikes for prodding refractory mooncalves—and a pair of goggles of darkened glass, set very much at the side, gave a bird-like quality to the metallic apparatus that covered his face. His arms did not project beyond his body case, and he carried himself upon short legs that, wrapped though they were in warm coverings, seemed to our terrestrial eyes inordinately flimsy. They had very short thighs, very long shanks, and little feet.

In spite of his heavy-looking clothing, he was progressing with what would be, from the terrestrial point of view, very considerable strides, and his dangling arm was busy. The quality of his motion during the instant of his passing suggested haste and a certain anger, and soon after we had lost sight of him we heard the bellow of a mooncalf change abruptly into a short, sharp squeal, followed by the scuffle of its acceleration. And gradually this howling receded, and then came to an end, so if the pastures sought had been attained.

We listened. For a space the moon world was still. But it was some time before we resumed our crawling search for the vanished sphere.

When next we saw mooncalves they were some little distance away from us in a place of tumbled rocks. The less vertical surfaces of the rocks were thick with a speckled green plant growing in dense mossy clumps, upon which these creatures were browsing. We stopped at the edge of the meads, amidst which we were crawling, at the sight of them, peering out at them and looking round for a second glimpse of a Selenite. They lay against their food like stupendous slugs, huge, greasy balls, eating greedily and noisily, with a sort of sobbing avowal. They seemed monsters of mere fatness, clumsy and overwhimmed to a degree that would make a Smithfield ox seem a model of agility. Their busy, writhing, chewing mouths, and eyes closed, together with the appetising sound of their munching, made up an effect of animal enjoyment that was singularly stimulating to our empty frames.

"Hogs!" said Cavor, with unusual passion. "Disgusting hogs!" and after one glare of angry eyes crawled off through the bushes to our right. I stayed long enough to see that the speckled plant was quite hopeless for human nourishment, then crawled after him, nibbling a quill of it between my teeth.

Presently we were arrested again by the proximity of a Selenite, and this time we were able to observe him more exactly. Now we could see that the Selenite covering was indeed clothing, and not a sort of crustaceous integument. He was quite similar in his costume to the former one we had glimpsed, except that ends of something like wadding were protruding from his neck, and he stood on a promontory of rock and moved his head this way and that, as though he were surveying his center. We lay quite still, fearing to attract his

attention if we moved, and after a time he turned about and disappeared.

We came upon another drove of mooncalves belabouring up a ravine, and then we passed over a place of sounds, sounds of beating machinery, as if some huge hall of industry came near the surface there. And while these sounds were still about us we came to the edge of a great open space, perhaps two hundred yards in diameter, and perfectly level. Save for a few lichens that advanced from its margin this space was bare, and presented a powdery surface of a dusty yellow colour. We were afraid to strike out across this space, but as it presented less obstruction to our crawling than the scrub, we went down upon it and began very circumspectly to skirt its edge.

For a little while the noises from below ceased and everything, save for the faint stir of the growing vegetation, was very still. Then abruptly there began an uproar, louder, more vehement, and nearer than any we had so far heard. Of a certainty it came from below. Instinctively we crouched as flat as we could, ready for a prompt plunge into the thicket beside us. Each knock and throb seemed to vibrate through our bodies. Louder grew this throbbing and beating, and that irregular vibration increased until the whole moon world seemed to be jerking and pulsing.

"Cover," whispered Cavor, and I turned towards the bushes.

At that instant came a thud like the thud of a gun, and then a thing happened—it still haunts me in my dreams. I had turned my head to look at Cavor's face, and thrust out my hand in front of me as I did so. And my hand met nothing! Plunged suddenly into a bottomless hole!

My chest hit something hard, and I found myself with my chin on the edge of an unfathomable chasm that had suddenly opened beneath me, my hand extended stiffly into the void. The whole of that flat circular area was no more than a gigantic lid, that was now sliding sideways from off the pit it had covered into a slot prepared for it.

Had it not been for Cavor I think I should have remained rigid, hanging over this margin and staring into the enormous gulf below, until at last the edges of the slot scraped me off and hurled me into its depths. But Cavor had not received the shock that had paralysed me. He had been a little distance from the edge when the lid had first opened, and perceiving the peril that held me helpless, gripped my legs and pulled me backward. I came into a sitting position, crawled away from the edge for a space on all fours, then staggered up and ran after him across the thundering, quivering chest of metal. It seemed to be swinging open with a steadily accelerated velocity, and the bushes in front of me shifted sideways as I ran.

I was none too soon. Cavor's back vanished amidst the bristling thicket, and as I scrambled up after him, the monstrous valve came into its position with a clang. For a long time we lay panting, not daring to approach the pit.

But at last very cautiously and bit by bit we crept into a position from which we could peer down. The bushes about us creaked and waved

with the force of a breeze that was blowing down the shaft. We could see nothing at first except smooth vertical walls descending at last into an impenetrable black. And then very gradually we became aware of a number of very faint and little lights going to and fro.

For a time that stupendous gulf of mystery held us so that we forgot even our sphere. In time, as we grew more accustomed to the darkness, we could make out very small, dim, elusive shapes moving about among these needle-point illuminations. We peered amazed and incredulous, understanding so little that we could find no words to say. We could distinguish nothing that would give us a clue to the meaning of the faint shapes we saw.

"What can it be?" I asked; "what can it be?"

"The engineering! . . . They must live in these caverns during the night, and come out during the day."

"Cavor!" I said. "Can they be—that—it was something like—men?"

"That was not a man."

"We dare risk nothing!"

"We dare do nothing until we find the sphere!"

"We can do nothing until we find the sphere."

He assented with a groan and stirred himself to move. He stared about him for a space, sighed, and indicated a direction. We struck out through the jungle. For a time we crawled resolutely, then with diminishing vigour. Presently among great shapes of fleshy purple there came a noise of trampling and cries about us. We lay close, and for a long time the sounds went to and fro and very near. But this time we saw nothing. I tried to whisper to Cavor that I could hardly go without food much longer, but my mouth had become too dry for whispering.

"Cavor," I said, "I must have food."

He turned a face full of dismay towards me.

"It's a case for holding out," he said.

"But I swear," I said, "and look at my lips!"

"I've been thirsty since time."

"If only some of that snow had remained!"

"It's clean gone! We're driving from arctic to tropical at the rate of a degree a minute. . . ."

I gnawed my hand.

"The sphere!" he said. "There is nothing for it but the sphere."

We rotated ourselves to another sport of crawling. My mind ran entirely on edible things, on the hiving profundity of summer drinks, more particularly I craved for beer. I was haunted by the memory of a sixteen gallon cask that had swaggered in my Lyonesse cellar. I thought of the adjacent larder, and especially of steak and kidney pie—tender steak and plenty of kidney, and rich, thick gravy between. Ever and again I was seized with fits of hungry pining. We came to flat places overgrown with fleshy red things, monstrous coralline growths; as we pushed against them they snapped and broke. I noted the quality of the broken surfaces. The confounded stuff certainly looked of a hisable texture. Then it seemed to me that it smelt rather well.

I picked up a fragment and sniffed at it.

"Cavor," I said in a hoarse undertone.

He glanced at me with his face screwed up. "Don't," he said. I put down the fragment, and we crawled on through this tempting darkness for a space.

"Cavor," I asked "why not?"

"Poison," I heard him say, but he did not look round.

We crawled some way before I decided.

"T'll chance it," said I.

He made a belated gesture to prevent me. I stuffed my mouth full. He crouched watching my face, his own twisted into the oddest expression. "It's good," I said.

"O Lord!" he cried.

He watched me munch, his face wrinkled between desire and disapproval, then suddenly succumbed to appetite and began to tear off huge mouthfuls. For a time we did nothing but eat.

The stuff was not unlike a terrestrial mushroom, only it was much lower in texture, and, as one swallowed it, it warmed the throat. At first we experienced a mere mechanical satisfaction in eating; then our blood began to run warmer, and we tingled at the lips and fingers, and then new and slightly irrelevant ideas came bubbling up in our minds.

"It's good," said I. "Infernally good! What a home for our surplus population! Our poor surplus population," and I broke off another large portion.

It filled me with a curiously benevolent satisfaction that there was such good food in the moon. The depression of my hunger gave way to an irrational exhilaration. The dread and discomfort in which I had been living vanished entirely. I perceived the moon no longer as a planet from which I most earnestly desired the means of escape, but as a possible refuge for human destitution. I think I forgot the Scientist, the moonmen, the M, and the noises completely so soon as I had eaten that fungus.

Cavor replied to my third repetition of my "surplus population" remark with similar words of approval. I felt that my head swam, but I put this down to the stimulating effect of food after a long fast. "Excellent discovery yours, Cavor," said I. "Be'd only to the 'info'."

"Whajaz mean?" asked Cavor. "'Scowery of the moon—be'd only to the 'info'?"

I looked at him, shocked at his suddenly hoarse voice, and by the badness of his articulation. It occurred to me in a flash that he was intoxicated, possibly by the fungus. It also occurred to me that he erred in imagining that he had discovered the moon; he had not discovered it, he had only reached it. I tried to lay my hand on his arm and explain this to him, but the tongue was too subtle for his brain. It was also unexpectedly difficult to express. After a momentary attempt to understand me—I remember wondering if the fungus had made my eyes as fishy as his—he set off upon some observations on his own account.

"We are," he announced with a solemn hiss, "the crashers o' what we eat and drink."

He repeated this, and as I was now in one of my subtle moods, I determined to dispute it. Possibly I wandered a little from the point. But Cavor certainly did not attend at all properly. He stood

up as well as he could, putting a hand on my head to steady himself, which was disrespectful, and stood staring about him, quite devoid now of any fear of the moon beings.

I tried to point out that this was dangerous for some reason that was not perfectly clear to me, but the word "dangerous" had somehow got mixed with "indigestest," and came out rather more like "injurjous" than either; and after an attempt to disentangle them, I resumed my argument, addressing myself principally to the unfamiliar but attentive coralline growths on either side. I felt that it was necessary to clear up this confusion between the moon and a potato at once—I wandered into a long parenthesis on the importance of precision of definition in argument. I did my best to ignore the fact that my bodily sensations were no longer agreeable.

In some way that I have now forgotten, my mind was led back to projects of colonization. "We must annex this moon," I said. "There must be no shilly-shally. This is part of the White Man's Burthen. Cavor—we are—*ido—Setap—mean—S a t r a p s*! Nempire Cavor never dreamt. B'in all the newspapers, Cavoricia. Bedfordicia. Bedfordicia—*bio—Landed. Mean—unlimited! Practically!*"

Certainly I was intoxicated.

I embarked upon an argument to show the infinite benefits our arrival would confer on the moon. I involved myself in a rather difficult proof that the arrival of Columbus was, on the whole, beneficial to America. I found I had forgotten the line of argument I had intended to pursue, and continued to repeat "Similar to Columbus," to fill up time.

From that point my memory of the action of that abominable fungus becomes confused. I remember vaguely that we declared our intention of standing no nonsense from any confounded insects, that we decided it ill became men to hide shamefully upon a mere satellite, that we equipped ourselves with huge armfuls of the fungus—whether for robotic purposes or not I do not know—and, heedless of the state of the beyond scrub, we started forth into the sunshine.

Almost immediately we must have come upon the Scientist. There were six of them, and they were marching in single file over a rocky place, making the most remarkable plping and whining sounds. They all seemed to become aware of us at once, all instantly became silent and motionless, like animals, with their faces turned towards us.

For a moment I was sobered.

"Insects," murmured Cavor, "insects! And they think I'm going to crawl about on my stomach—on my verberated stomach!"

"Stomach," he repeated slowly, as though he showed the indignity.

Then suddenly, with a shout of fury, he made three vast strides and leapt towards them. He leapt badly; he made a series of convulsions in the air, whirled right over them, and vanished with an enormous splash amidst the cactus bladders. What the Scientist made of this amazing, and to my mind undignified irruption from another planet, I have no means of guessing. I seem to remember the sight of their backs as they ran in all directions,

but I am not sure. All these last incidents before oblivion came are vague and faint in my mind. I know I made a step to follow Cavor, and tripped and fell headlong among the rocks. I was, I am certain, suddenly and vehemently ill. I seem to remember a violent struggle, and being gripped by metallic clamps. . . .

My next clear recollection is that we were prisoners at we knew not what depths beneath the moon's surface; we were in darkness amidst strange distracting noises; our bodies were covered with scratches and bruises, and our heads racked with pain.

## CHAPTER XII

### The Solenite's Face

I FOUND myself sitting crouched together in a tumultuous darkness. For a long time I could not understand where I was, nor how I had come to this perplexity. I thought of the cupboard into which I had been thrust at times when I was a child, and then of a very dark and noisy bedroom in which I had slept during an illness. But these sounds about me were not the noises I had known, and there was a thin flavour in the air like the wind of a stable. Then I supposed we must still be at work upon the sphere, and that somehow I had got into the collar of Cavor's house. I remembered we had finished the sphere, and fancied I must still be in it and travelling through space.

"Cavor," I said, "cannot we have some light?"

There came no answer.

"Cavor!" I insisted.

I was answered by a groan. "My head!" I heard him say; "my head!"

I attempted to press my hands to my brow, which ached, and discovered they were tied together. This startled me very much. I brought them up to my mouth and felt the cold smoothness of metal. They were chained together. I tried to separate my legs, and made out they were similarly fastened, and also that I was fastened to the ground by a much thicker chain about the middle of my body.

I was more frightened than I had yet been by anything in all our strange experience. For a time I tugged silently at my bonds. "Cavor!" I cried out sharply. "Why am I tied? Why have you tied me hand and foot?"

"I haven't tied you," he answered. "It's the Solenites."

The Solenites! My mind hung on that for a space. Then my memories came back to me: the snowy desolation, the thawing of the air, the growth of the plants, our strange hopping and crawling among the rocks and vegetation of the crater. All the distress of our frantic search for the sphere returned to me. . . . Finally the opening of the great lid that covered the pit!

Then as I strained to trace our later movements down to our present plight, the pain in my head became intolerable. I came to an insurmountable barrier, an obstinate blank.

"Cavor!"

"Yes!"

"Cavor, where are we? Do you know where we are?"

"How should I know?"

"Are we dead?"

"What nonsense!"

"They've got us, then!"

He made no answer but a grunt. The lingering traces of the poison seemed to make him oddly irritable.

"What do you mean to do?"

"How should I know what to do?"

"Oh, very well!" said I, and became silent. Presently, I was roused from a stupor. "O Lord!" I cried; "I wish you'd stop that humming!"

We leaped into silence again, listening to the dull confusion of noises like the muffled sounds of a street or factory that filled our ears. I could make nothing of it, my mind pursued first one rhythm and then another, and questioned it in vain. But after a long time I became aware of a new and sharper element, not mingling with the rest but standing out, as it were, against that cloudy background of sound. It was a series of relatively very little definite sounds,appings and rubbings, like a loose spray of ivy against a window or a bird moving about upon a box. We listened and peered about us, but the darkness was a velvet pall. There followed a noise like the subtle movement of the wards of a well-oiled lock. And then there appeared before me, hanging as it seemed in an immensity of black, a thin bright line.

"Look!" whispered Cavor very softly.

"What is it?"

"I don't know."

We stared.

The thin bright line became a band, and broader and paler. It took upon itself the quality of a bluish light falling upon a white-washed wall. It ceased to be parallel-sided; it developed a deep indentation on one side. I turned to remark this to Cavor, and was intended to see his ear in a brilliant illumination—all the rest of him in shadow. I twisted my head round as well as my hands would permit. "Cavor," I said, "it's behind!"

His ear vanished—gave place to an eye!

Suddenly the crack that had been admitting the light broadened out, and revealed itself as the space of an opening door. Beyond was a sapphire vista, and in the doorway stood a grotesque outline silhouetted against the glare.

We both made convulsive efforts to turn, and falling, cut starting over our shoulders at this. My first impression was of some clumsy quadruped with lowered head. Then I perceived it was the slender, pinched body and short and extremely attenuated bony legs of a Solenite, with his head depressed between his shoulders. He was without the helmet and body covering they wear when upon the exterior of the satellite.

He was a black, black figure to us, but instinctively our imaginations supplied features to his very human outline. I, at least, took it instantly that he was somewhat hunchbacked, with a high forehead and long features.

He came forward three steps and paused for a time. His movements seemed absolutely malicious.

Then he came forward again. He walked like a bird, his feet fell one in front of the other. He stepped out of the ray of light that came through the doorway and it seemed as though he vanished altogether in the shadow.

For a moment my eyes sought him in the wrong place, and then I perceived him standing facing us both in the full light. Only the human features I had attributed to him were not there at all!

Of course I ought to have expected that, only I didn't. It came to me as an absolute, for a moment an overwhelming shock. It seemed as though it wasn't a face, as though it must needs be a mask, a horror, a deformity, that would presently be discovered or explained. There was no nose, and the thing had dull bulging eyes at the side—in the silhouette I had supposed they were ears. There were no ears. . . . I have tried to draw one of these heads, but I cannot. There was a mouth, downwardly curved, like a human mouth in a face that stares fiercely. . . .

The neck on which the head was poised was jointed in three places, almost like the short joints in the leg of a crab. The joints of the limbs I could not see, because of the putter-like straps in which they were swathed, and which formed the only clothing the being wore.

There the thing was, looking at us!

At the time my mind was taken up by the mad impossibility of the creature. I suppose he also was amazed, and with more reason, perhaps, for amazement than we. Only, confounded him! he did not show it. We did at least know what had brought about this meeting of incompatible creatures. But conceive how it would seem to decent Londoners, for example, to come upon a couple of living things, as big as men and absolutely unlike any other earthly animals, cowering about among the sheep in Hyde Park! It must have taken him like that.

Figure two! We were bound hand and foot, fagged and filthy; our beards two inches long, our faces scratched and bloody. Cavor you must imagine in his knickerbockers (torn in several places by the bayonet scrub), his Jaeger shirt and old cricket cap, his wiry hair wildly disordered, a tail to every quarter of the heavens. In that blue light his face did not look red but very dark, his lips and the drying blood upon my hands seemed black. If possible I was in a worse plight than he, on account of the yellow fungus into which I had jumped. Our jackets were unbuttoned, and our shoes had been taken off and lay at our feet. And we were sitting with our backs to this queer bluish light, peering at such a monster as Deities might have invented.

Cavor broke the silence; started to speak, went hoarse, and cleared his throat. Outside began a terrific bellowing, as if a mooncalf were in trouble. It ended in a shriek, and everything was still again.

Presently the Schalkie turned about, flickered into the shadow, stood for a moment retrospective at the door, and then closed it on us; and once more we were in that marvellous mystery of darkness into which we had awakened.

## CHAPTER XIII

### Mr. Cavor Makes Some Suggestions

FOR a time neither of us spoke. To focus together all the things we had brought upon ourselves, seemed beyond my mental powers.

"They've got us," I said at last.

"It was that fungus."

"Well—if I hadn't taken it we should have fainted and starved."

"We might have found the sphere."

I lost my temper at his persistence, and swore to myself. For a time we bated one another in silence. I drummed with my fingers on the floor between my knees, and gritted the links of my future together. Presently I was forced to talk again.

"What do you make of it, anyhow?" I asked humbly.

"They are reasonable creatures—they can make things and do things—These lights we saw. . . ."

He stopped. It was clear he could make nothing of it.

When he spoke again it was to confess, "After all, they are more human than we had a right to expect. I suppose—"

He stopped irritably.

"Yes?"

"I suppose, anyhow—on any planet where there is an intelligent animal—it will carry its brain case upward, and have hands, and walk erect. . . ."

Presently he broke away in another direction.

"We are some way in," he said. "I mean—perhaps a couple of thousand feet or more."

"Why?"

"It's cooler. And our voices are so much louder. That faded quality—it has altogether gone. And the feeling in one's ears and throat."

I had not noted that, but I did now.

"The air is denser. We must be some depths—a mile even, we may be—inside the moon."

"We never thought of a world inside the moon."

"No."

"How could we?"

"We might have done. Only—One gets into habits of mind."

He thought for a time.

"Now," he said, "it seems such an obvious thing."

"Of course! The moon must be enormously cavernous, with an atmosphere within and at the centre of its caverns a sea."

"One knew that the moon had a lower specific gravity than the earth, one knew that it had little air or water outside, one knew, too, that it was closer placed to the earth, and that it was unaccountable that it should be different in composition. The inference that it was hollowed out was as clear as day. And yet one never saw it as a fact. Kepler, of course—"

His voice had the interest now of a man who has discovered a pretty sequence of reasoning.

"Yes," he said, "Kepler with his sub-colossal was right after all."

"I wish you had taken the trouble to find that out before we came," I said.

He answered nothing, hurrying to himself softly, as he pursued his thoughts. My temper was going.

"What do you think has become of the sphere, anyhow?" I asked.

"Lost," he said, like a man who answers an uninteresting question.

"Among these planets?"

"Unless they find it."

"And then?"

"How can I tell?"

"Cave," I said, with a sort of hysterical bitterness, "things look bright for my Company. . . ."

He made no answer.

"Good Lord!" I exclaimed. "Just think of all the trouble we took to get into this pickle! What did we come for? What are we after? What was the moon to us or we to the moon? We wanted too much, we tried too much. We ought to have started the little things first. It was you who proposed the moon! Those Cavorts spring blinds! I am certain we could have worked them for terrestrial purposes. Certain! Did you really understand what I proposed? A steel cylinder——"

"Rubbish!" said Caver.

We ceased to converse.

For a time Caver kept up a broken monologue without much help from me.

"If they find it," he began, "if they find it . . . what will they do with it? Well, that's a question.

"It may be that's the question. They won't understand it, anyhow. If they understood that sort of thing they would have come long since to the earth. Would they? Why shouldn't they? But they would have sent something—— They couldn't keep their hands off such a possibility. No! But they will examine it. Clearly they are intelligent and inquisitive. They will examine it—get inside it—trifle with the studs. Off! . . . That would mean the moon for us far all the rest of our lives. Strange creatures, strange knowledge . . ."

"As for strange knowledge——" said I, and language failed me.

"Look here, Bedford," said Caver, "you came on this expedition of your own free will."

"You said to me, 'Call it prospecting.'"

"There's always risks in prospecting."

"Especially when you do it unarmed and without thinking out every possibility."

"I was so taken up with the sphere. The thing rushed on us, and carried us away."

"Rushed on me, you mean."

"Rushed on me just as much. How was I to know when I set to work on molecular physics that the business would bring me here—of all places?"

"It's this accursed science," I cried. "It's the very Devil. The medieval perfots and persecutors were right and the Moderns are all wrong. You tamper with it—and it offers you gifts. And directly you take them it knocks you to pieces in some unexpected way. Old passions and new weapons—now it upsets your religion, now it upsets your social ideas, now it whirls you off to desolation and misery!"

"Anyhow, it's no use your quarrelling with me now. These creatures—these Selachians, or whatever we choose to call them—have got us tied hand and foot. In whatever temper you choose to go through with it you will have to go through with it.

. . . We have experiences before us that will need all our coolness."

He paused as if he required my assent. But I sat sulking. "Confound your science!" I said.

"The problem is communication. Certainly, I fear, will be different. Pointing, for example. No creatures but men and monkeys point."

That was too obviously wrong for me. "Pretty nearly every animal," I cried, "points with its eyes or nose."

Caver meditated over that. "Yes," he said at last, "and we don't. There's such differences—such differences!"

"One might. . . . But how can I tell? There is speech. The sounds they make, a sort of fluting and piping. I don't see how we are to imitate that. Is it their speech, that sort of thing? They may have different senses, different means of communication. Of course they are minds and we are minds; there must be something in common. Who knows how far we may not get to an understanding?"

"The things are outside us," I said. "They're more different from us than the strangest animals on earth. They are a different clay. What is the good of talking like this?"

Caver thought. "I don't see that. Where there are minds they will have something similar—even though they have been evolved on different planets. Of course if it was a question of instincts, if we or they are no more than animals——"

"Well, are they? They're much more like cats on their hind legs than human beings, and who ever got to any sort of understanding with cats?"

"But these machines and clothing! No, I don't hold with you, Bedford. The difference is wide——"

"It's insurmountable."

"The resemblance must bridge it. I remember reading a paper once by the late Professor Galton on the possibility of communication between the planets. Unhappily, at that time it did not seem probable that that would be of any material benefit to me, and I fear I did not give it the attention I should have done—in view of this state of affairs. Yet. . . . Now, let me see!"

"His idea was to begin with those broad truths that must underlie all conceivable mental existences and establish a basis on those. The great principles of geometry, to begin with. He proposed to take some leading proposition of Euclid's, and show by construction that its truth was known to us, to demonstrate, for example, that the angles at the base of an isosceles triangle are equal, and that if the equal sides be produced the angles on the other sides of the base are equal also, or that the square on the hypotenuse of a right-angle triangle is equal to the sum of the squares on the two other sides. By demonstrating our knowledge of these things we should demonstrate our possession of a reasonable intelligence. . . . Now, suppose I . . . I might draw the geometrical figure with a wet finger, or even trace it in the air . . ."

He fell silent. I sat meditating his words. For a time his wild hope of communication, of interpretation, with these weird beings held me. Then that angry despair that was a part of my exhaustion

and physical misery resumed its sway. I perceived with a sudden novel vividness the extraordinary folly of everything I had ever done. "Ass!" I said; "oh, ass, unspeakable ass. . . . I seem to exist only to go about doing preposterous things. Why did we ever leave the thing? . . . Dipping about looking for patents and concessions in the crevices of the moon! . . . If only we had had the sense to fasten a handkerchief to a stick to show where we had left the sphere!"

I subsided, fuming.

"It is clear," meditated Cover, "they are intelligent. One can hypothesize certain things. As they have not killed us at once, they must have ideas of mercy. Mercy! at any rate of restraint. Possibly of intercourse. They may meet us. And this apartment and the glingags we had of its guardian. These fetters! A high degree of intelligence. . . ."

"I wish to heaven," cried I, "I'd thought even twice! Plunge after plunge. First one duby start and then another. It was my confidence in you! Why didn't I stick to my play? That was what I was equal to. That was my world and the life I was made for. I could have finished that play. I'm certain . . . it was a good play. I had the scenario as good as done. Then. . . . Conceive it! leaping to the moon! Practically—I've thrown my life away! That old woman in the fan near Canterbury had better sense than——"

I looked up, and stopped in mid-sentence. The darkness had given place to that bluish light again. The door was opening, and several noiseless Selenites were coming into the chamber. I became quite still, staring at their grotesque faces.

Then suddenly my sense of disagreeable strangeness changed to interest. I perceived that the foremost and second carried bowls. One elemental need at least our minds could understand in common. They were bowls of some metal that, like our fetters, looked dark in that bluish light; and each contained a number of whitish fragments. All the cloudy pain and misery that oppressed me rushed together and took the shape of hunger. I eyed these bowls wistfully, and, though it returned to me in dreams, at that time it seemed a small matter that at the end of the arms that lowered one towards me were not hands, but a sort of flap and thumb, like the end of an elephant's trunk.

The stuff in the bowl was loose in texture, and whitish brown in colour—rather like lumps of some cold soufflé, and it smelt faintly like mushrooms. From a partially divided carcase of a mooncalf that we presently saw, I am inclined to believe it must have been mooncalf flesh.

My hands were so tightly chained that I could barely contrive to reach the bowl; but when they saw the effort I made, two of them dexterously released one of the turns about my wrist. Their tentacle hands were soft and cold to my skin. I immediately seized a mouthful of the food. It had the same lumpiness in texture that all organic structures seem to have upon the moon; it tasted rather like a soufflé or a damp meringue, but in no way was it disagreeable. I took two other

mouthfuls. "I wanted—food?" said I, tearing off a still larger piece. . . .

For a time we ate with an utter absence of self-consciousness. We ate and presently drank like tramps in a soup kitchen. Never before nor since have I been hungry to the ravenous pitch, and aware that I have had this very experience I could never have believed that, a quarter of a million of miles out of our proper world, in utter perplexity of soul, surrounded, watched, touched by beings more grotesque and inhuman than the worst creations of a nightmare, it would be possible for me to eat in utter forgetfulness of all these things. They stood about us watching us, and ever and again making a slight elusive twitting that stood them, I suppose, in the stead of speech. I did not even shiver at their touch. And when the first seal of my feeding was over, I could note that Cover, too, had been eating with the same shameless abandon.

## CHAPTER XIV

### Experiments in Intercourse

WHEN at last we had made an end of eating, the Selenites linked our hands closely together again, and then untwisted the chains about our feet and rebound them, so as to give us a limited freedom of movement. Then they untensed the chains about our waists. To do all this they had to handle us freely, and ever and again one of their queer heads came down close to my face, or a soft tentacle-hand touched my head or neck. I don't remember that I was afraid then or repelled by their proximity. I think that our incurable anthropomorphism made us imagine there were human heads inside their masks. The skin, like everything else, looked bluish, but that was on account of the light; and it was hard and shiny, quite in the beetle-wing fashion, not soft, or moist, or hairy, as a vertebrate animal's would be. Along the crest of the head was a low ridge of whitish spines running from back to front, and a much larger ridge curved on either side over the eyes. The Selenite who untied me used his mouth to help his hands.

"They seem to be releasing us," said Cover. "Remember we are on the moon! Make no sudden movements!"

"Are you going to try that geometry?"

"If I get a chance. But, of course, they may make an advance first."

We remained passive, and the Selenites, having finished their arrangements, stood back from us, and seemed to be looking at us. I say seemed to be, because as their eyes were at the side and not in front, one had the same difficulty in determining the direction in which they were looking as one has in the case of a hen or a fish. They conversed with one another in their reedy tones, that seemed to me impossible to imitate or define. The door behind us opened wider, and, glancing over my shoulder, I saw a vague, large space beyond, in which quite a little crowd of Selenites were standing. They seemed a curiously miscellaneous rabble.

"Do they want us to imitate those sounds?" I asked Cavor.

"I don't think so," he said.

"It seems to me that they are trying to make us understand something."

"I can't make anything of their gestures. Do you notice this one, who is worrying with his head like a man with an uncomfortable collar?"

"Let us shake our heads at him."

We did that, and finding it ineffectual, attempted an imitation of the *Selenites'* movements. That seemed to interest them. At any rate they all set up the same movement. But as that seemed to lead to nothing, we desisted at last and so did they, and fell into a piping argument among themselves. Then one of them, shorter and very much thicker than the others, and with a particularly wide mouth, squatted down suddenly beside Cavor, and put his hands and feet in the same posture as Cavor's were bound, and then by a dexterous movement stood up.

"Cavor," I shouted, "they want us to get up!"

He stared open-mouthed. "That's it!" he said.

And with much heaving and grunting, because our hands were tied together, we contrived to struggle to our feet. The *Selenites* made way for our elephantine heavings, and seemed to twitter more volubly. As soon as we were on our feet the thick-set *Selenite* came and patted each of our faces with his tentacles, and walked towards the open doorway. That also was plain enough, and we followed him. We saw that four of the *Selenites* standing in the doorway were much taller than the others, and clothed in the same manner as those we had seen in the crater, namely, with spiked round helmets and cylindrical body-cases, and that each of the four carried a good with spike and guard made of that same dull-looking metal as the hawks. These four closed about us, one on either side of each of us, as we emerged from our chamber into the cavern from which the light had come.

We did not get our impression of that cavern all at once. Our attention was taken up by the movements and attitudes of the *Selenites* immediately about us, and by the necessity of controlling our motion, lest we should startle and alarm them and ourselves by some excessive stride. In front of us was the short, thick-set being who had solved the problem of asking us to get up, moving with gestures that seemed, almost all of them, intelligible to us, inviting us to follow him. His spot-like face turned from one of us to the other with a quickness that was clearly interrogative. For a time, I say, we were taken up with these things.

But at last the great place that formed a background to our movements asserted itself. It became apparent that the source of much, at least, of the tumult of sounds which had filled our ears ever since we had recovered from the stupefaction of the fungus was a vast mass of machinery in active movement, whose flying and whirling parts were visible indistinctly over the heads and between the bodies of the *Selenites* who walked about us. And not only did the web of sounds that filled the air proceed from this mechanism, but also the peculiar blue light that irradiated the whole place. We had

taken it as a natural thing that a subterranean cavern should be artificially lit, and even now, though the fact was patent to my eyes, I did not really grasp its import until presently the darkness came. The meaning and structure of this huge apparatus we saw I cannot explain, because we neither of us learnt what it was for or how it worked. Once after another, his shafts of metal flung out and up from its centre, their heads travelling in what seemed to me to be a parabolic path; each dropped a sort of dangling arm as it rose towards the apex of its flight and plunged down into a vertical cylinder, forcing this down before it. About it moved the shapes of tenders, little figures that seemed vaguely different from the beings about us. As each of the three dangling arms of the machine plunged down, there was a clunk and then a roaring, and out of the top of the vertical cylinder came pouring this incandescent substance that lit the place, and ran over as milk runs over a boiling pot, and dripped luxuriously into a tank of light below. It was a cold blue light, a sort of phosphorescent glow but infinitely brighter, and from the tanks into which it fell it ran in conduits athwart the cavern.

Thud, thud, thud, thud, came the sweeping arms of this unintelligible apparatus, and the light substance hissed and poured. At first the thing seemed only reasonably large and near to us, and then I saw how exceedingly little the *Selenites* upon it seemed, and I realized the full immensity of cavern and machine. I looked from this tremendous affair to the faces of the *Selenites* with a new respect. I stopped, and Cavor stopped, and stared at this thunderous engine.

"But this is stupendous!" I said. "What can it be for?"

Cavor's blue-lit face was full of an intelligent respect. "I can't dream! Surely these beings—Men could not make a thing like that! Look at those arms, are they on connecting rods?"

The thick-set *Selenite* had gone some paces unheeded. He came back and stood between us and the great machine. I avoided seeing him, because I guessed somehow that his idea was to beckon us onward. He walked away in the direction he wished us to go, and turned and came back, and flicked our faces to attract our attention.

Cavor and I looked at one another.

"Cannot we show him we are interested in the machine?" I said.

"Yes," said Cavor. "We'll try that." He turned to our guide and smiled, and pointed to the machine, and pointed again, and then to his head, and then to the machine. By some defect of reasoning he seemed to imagine that broken English might help these gestures. "He took 'im," he said, "we think 'im very much. Yes."

His behaviour seemed to check the *Selenites* in their desire for our progress for a moment. They faced one another, their queer heads moved, the twittering voices came quick and liquid. Then one of them, a lean, tall creature, with a sort of mantle added to the patine in which the others were dressed, twisted his elephant trunk of a hand about



Cover's waist, and pulled him gently to follow our guide, who again went on ahead.

Cover resisted. "We may just as well begin explaining ourselves now. They may think we are new animals, a new sort of moonself perhaps! It is most important that we should show an intelligent interest from the outset."

He began to shake his head violently. "No, no," he said, "we not come on one minute. We look at 'em."

"Isn't there some geometrical point you might bring in apropos of that affair?" I suggested, as the Selenites conferred again.

"Possibly a parabolic—" he began.

He yelled loudly, and leaped six feet or more!

One of the four armed moon-men had pricked him with a goad!

I turned on the goad-bearer behind me with a swift threatening gesture, and he started back. This and Cover's sudden shout and leap clearly astonished all the Selenites. They recoiled hastily, facing us. For one of those moments that seem to last for ever, we stood in angry protest, with a confused reminder of those inhuman beings about us.

"He pricked me!" said Cover, with a catching of the voice.

"I saw him," I answered.

"Confound it!" I said to the Selenites: "we're not going to stand that! What on earth do you take us for?"

I glanced quickly right and left. Far away across the blue wilderness of cavern I saw a number of other Selenites running towards us; broad and slender they were, and one with a larger head than the others. The cavern spread wide and low, and receded in every direction into darkness. Its roof, I remember, seemed to budge down as if with the weight of the vast thickness of rocks that prisoned us. There was no way out of it—no way out of it. Above, below, in every direction, was the unknown, and these inhuman creatures, with goads and postures, confronting us, and we two unsupported men!

## CHAPTER XV The Giddy Bridge

**J**UST for a moment that hostile pause endured. I suppose that both we and the Selenites did some very rapid thinking. My clearest impression was that there was nothing to put my back against, and that we were bound to be surrounded and killed. The overwhelming folly of our presence there loomed over me in black, enormous reproach. Why had I ever launched myself on this mad, inhuman expedition?

Cover came to my side and laid his hand on my arm. His pale and terrified face was ghastly in the blue light.

"We can't do anything," he said. "It's a mistake. They don't understand. We must go. As they want us to go."

I looked down at him, and then at the fresh Selenites who were coming to help their fellows. "If I had my hands free—"

"It's no use," he panted. "It's absolutely no use."

"No."

"We'll go."

And he turned about and led the way in the direction that had been indicated for us.

I followed, trying to look as subdued as possible, and feeling at the chains about my wrists. My blood was boiling. I noted nothing more of that cavern, though it seemed to take a long time before we had marched across it, or if I noted anything I forgot it as I saw it. My thoughts were concentrated, I think, upon my chains and the Selenites, and particularly upon the helmeted ones with the goads. At first they marched parallel with us, and at a respectful distance, but presently they were overtaken by three others, and then they drew nearer, until they were within arm's length again. I winced like a beaten horse as they came near to us. The shorter, thicker Selenite marched at first on our right flank, but presently came in front of us again.

How well the picture of that grasping has bitten into my brain; the back of Cover's dominant head just in front of me, and the dejected droop of his shoulders, and our guide's gaping visage, perpetually jerking about him, and the goad-bearers on either side, watchful, yet open-mouthed—a blue monochrome. And after all, I do remember one other thing besides the purely personal affair, which is, that a sort of gutter came presently across the floor of the cavern, and then ran along by the side of the path of rock we followed. And it was full of that same bright blue luminous stuff that flowed out of the great machine. I walked close beside it, and I can testify it radiated not a particle of heat. It was brightly shining, and yet it was neither warmer nor colder than anything else in the cavern.

Clang, clang, clang, we passed right under the thumping levers of another vast machine, and so came at last to a wide tunnel, in which we could even hear the pad, pad, of our shoeless feet, and which, save for the trickling thread of blue to the right of us, was quite silent. The shadows made gigantic travesties of our shapes and those of the Selenites on the irregular wall and roof of the tunnel. Ever and again crystals in the walls of the tunnel scintillated like gems, ever and again the tunnel expanded into a stalactite cavern, or gave off branches that vanished into darkness.

We seemed to be marching down that tunnel for a long time. "Trickle, trickle," went the flowing light very softly, and our footsteps and their echoes made an irregular peddle, peddle. My mind settled down to the question of my chains. If I were to slip off one turn so, and then to twist it so . . .

If I tried to do it very gradually, would they see I was slipping my wrist out of the looser turn? If they did, what would they do?

"Bedford," said Cover, "it goes down. It keeps on going down."

His remark roused me from my sullen pre-occupation.

"If they wanted to kill us," he said, dropping back to come level with me, "there is no reason why they should not have done it."

"No," I admitted, "that's true."

"They don't understand us," he said, "they think we are merely strange animals, some wild sort of mooncalf birth, perhaps. It will be only when they have observed us better that they will begin to think we have minds——"

"When you trace those geometrical problems," said I.

"It may be that."

We trumped on for a space.

"You see," said Cavor, "these may be Scientists of a lower class."

"The infernal fools!" said I viciously, glancing at their exasperating faces.

"If we endure what they do to us——"

"We've got to endure it," said I.

"There may be others less stupid. This is the mere outer fringe of their world. It must go down and down, cavern, passage, tunnel, down at last to the sea—hundreds of miles below."

His words made me think of the mile or so of rock and tunnel that might be over our heads already. It was like a weight dropping on my shoulders. "Away from the sun and air," I said. "Even a mile half a mile deep is stuffy."

"This is not, anyhow. It's probable—— Ventilation! The air would blow from the dark side of the moon to the sunlit, and all the carbonic acid gas would well out there and feed those plants. Up this tunnel, for example, there is quite a breeze. And what a world it must be. The nearest we have in that shaft, and those machines——"

"And the good," I said. "Don't forget the good!"

He walked a little in front of me for a time.

"Even that good——" he said.

"Well?"

"I was angry at the time. Nature—— It was perhaps necessary we should get on. They have different skins, and probably different nerves. They may not understand our objection—— Just as a being from Mars might not like our earthly habit of nudging——"

"They'd better be careful how they nudge me."

"And about that geometry. After all, their way is a way of understanding, too. They begin with the elements of life and not of thought. Food. Compulsion. Pain. They strike at fundamentals."

"There's no doubt about that," I said.

He went on to talk of the enormous and wonderful world into which we were being taken. I realized slowly from his tone, that even now he was not absolutely in despair at the prospect of going ever deeper into this infernal planet-burrow. His mind ran on machines and invention, to the exclusion of a thousand dark things that beset me. It wasn't that he intended to make any use of these things, he simply wanted to know them.

"After all," he said, "this is a tremendous occasion. It is the meeting of two worlds! What are we going to see? Think of what is below us here."

"We shan't see much if the light isn't better," I remarked.

"This is only the outer crust. Down below—— On this scale—— There will be everything. Do you notice how different they seem one from another? The story we shall take back!"

"Some rare sort of animal," I said, "might com-

fort himself in that way while they were bringing him to the Zoo. . . . It doesn't follow that we are going to be shown all these things."

"When they find we have reasonable minds," said Cavor, "they will want to learn about the earth. Even if they have no generous emotions, they will teach in order to learn. . . . And the things they must know! The unanticipated things!"

He went on to speculate on the possibility of their knowing things he had never hoped to learn on earth, speculating in that way, with a raw wound from that gash already in his skin! Much that he said I forget, for my attention was drawn to the fact that the tunnel along which we had been marching was opening out wider and wider. We seemed, from the feeling of the air, to be going out into a huge space. But how big the space might really be we could not tell, because it was unfit. Our little stream of light ran in a deluding thread and vanished far ahead. Presently the rocky walls had vanished altogether on either hand. There was nothing to be seen but the path in front of us and the trickling hurrying rivulet of blue phosphorescence. The figures of Cavor and the guiding Scientist marched before me, the sides of their legs and heads that were towards the rivulet were clear and bright blue, their darkened sides, now that the reflection of the tunnel wall no longer lit them, merged indistinguishably in the darkness beyond.

And soon I perceived that we were approaching a declivity of some sort, because the little blue stream dipped suddenly out of sight.

In another moment, as it seemed, we had reached the edge. The shining stream gave one meander of hesitation and then rushed over. It fell to a depth at which the sound of its descent was absolutely lost to us. Far below was a bluish glow, a sort of blue mist—at an infinite distance below. And the darkness the stream dropped out of became utterly void and black, save that a thing like a plank projected from the edge of the cliff and stretched out and faded and vanished altogether. There was a warm air blowing up out of the gulf.

For a moment I and Cavor stood as near the edge as we dared, peering into a blue-tinged profundity. And then our guide was puffing at my arm.

Then he left me, and walked to the end of that plank and stopped upon it, looking back. Then when he perceived we watched him, he turned about and went on along it, walking as surely as though he was on firm earth. For a moment his form was distinct, then he became a blue blur, and then vanished into the obscurity. I became aware of some vague shape looming darkly out of the black.

There was a pause. "Surely——" said Cavor.

One of the other Scientists walked a few paces out upon the plank, and turned and looked back at us unconcernedly. The others stood ready to follow after us. Our guide's expectant figure reappeared. He was returning to see why we had not advanced.

"What is that beyond there?" I asked.

"I can't see."

"We can't cross this at any price," said I.

"I could not go three steps on it," said Cover, "even with my hands free."

We looked at each other's drawn faces in blank consternation.

"They can't know what it is to be giddy!" said Cover.

"It's quite impossible for us to walk that plank." "I don't believe they see as we do. I've been watching them. I wonder if they know this is simply blackness for us. How can we make them understand?"

"Anyhow, we must make them understand."

I think we said these things with a vague half hope the Selenites might somehow understand. I knew quite clearly that all that was needed was an explanation. Then as I saw their faces, I realized that an explanation was impossible. Just here it was that our resemblances were not going to bridge our differences. Well, I wasn't going to walk the plank, anyhow. I slipped my wrist very quickly out of the coil of chain that was loose, and then began to twist my wrists in opposite directions. I was standing nearest to the bridge, and as I did this two of the Selenites laid hold of me, and pulled me gently towards it.

I shook my head violently. "No go," I said, "no use. You don't understand."

Another Selenite added his compulsion. I was forced to step forward.

"I've got an idea," said Cover; but I know his ideas.

"Look here!" I exclaimed to the Selenites. "Steady on! It's all very well for you——"

I spring round upon my heel. I burst out into curses. For one of the armed Selenites had stalked me behind with his good.

I wrenched my wrist free from the little tentacles that held them. I turned on the good-bearer. "Confound you!" I cried. "I've warned you of that. What on earth do you think I'm made of, to stick that into me? If you touch me again——"

By way of answer he pricked me fartherth.

I heard Cover's voice in alarm and entreaty. Even then I think he wanted to compromise with these creatures. "I say, Bedford," he cried, "I know a way!" But the sting of that second stab seemed to set free some pent-up reserve of energy in my being. Instantly the link of the wrist-chain snapped, and with it snapped all considerations that had held as neutralizing in the hands of these moon creatures. For that second, at least, I was mad with fear and anger. I took no thought of consequences. I hit straight out at the face of the thing with the good. The chain was twisted round my foot. . . .

There came another of these beastly surprises of which the moon world is full.

My mailed hand seemed to go clean through him. He smashed like—like some softish sort of sweet with liquid in it! He broke right in! He squelched and splashed. It was like hitting a damp toadstool. The slimy body went splashing a dozen yards, and fell with a sobby impact. I was astonished. I was incredulous that any living thing could be so slimy. For an instant I could have believed the whole thing a dream.

Then it had become real and imminent again. Neither Cover nor the other Selenites seemed to have done anything from the time when I had turned about to the time when the dead Selenite hit the ground. Every one stood back from us two, every one alert. That arrest seemed to last at least a second after the Selenite was down. Every one must have been taking the thing in. I seem to remember myself standing with my arm half retracted, trying also to take it in. "What next?" disconcerted my brain; "what next?" Then in a moment every one was moving!

I perceived we must get our chains loose, and that before we could do this these Selenites had to be beaten off. I faced towards the group of the three good-bearers. Instantly one threw his good at me. It swished over my head, and I suppose went flying into the abyss behind.

I leaped right at him with all my might as the good flew over me. He turned to run as I jumped, and I bore him to the ground, came down right upon him, and slipped upon his smashed body and fell. He seemed to wriggle under my foot.

I came into a sitting position, and on every hand the blue backs of the Selenites were receding into the darkness. I bent a link by main force and undid the chain that had hampered me about the ankles, and sprang to my feet, with the chain in my hand. Another good, fussy javelin-wise, whistled by me, and I made a rush towards the darkness out of which it had come. Then I turned back towards Cover, who was still standing in the light of the rivulet near the gulf convulsively busy with his wrists, and at the same time jabbering nonsense about his idea.

"Come on!" I cried.

"My hands!" he answered.

Then, realizing that I dared not run back to him, because my ill-calculated steps might carry me over the edge, he came shuffling towards me, with his hands held out before him.

I gripped his chains at once to unfasten them.

"Where are they?" he panted.

"Run away. They'll come back. They're throwing things! Which way shall we go?"

"By the light. To that tunnel. Eh?"

"Yes," said I, and his hands were free.

I dropped on my knees and fell to work on his ankle bonds. Which came something—I know not what—and splashed the livid streamlet into drops about us. Far away on our right a piping and whistling began.

I whipped the chain off his feet, and put it in his hand. "Hit with that!" I said, and without waiting for an answer, cut off in big bounds along the path by which we had come. I had a nasty sort of feeling that these things could jump out of the darkness on to my back. I heard the impact of his leaps come following after me.

We ran to vast strides. But that running, you must understand, was an altogether different thing from any running on earth. On earth one leaps and smashes instantly into the ground again, but on the moon, because of its weaker pull, one shot through the air for several seconds before one came to earth. In spite of our violent hurry this gave an

effect of long pauses, pauses in which one might have counted seven or eight. "Stop," and one scoured off! All sorts of questions ran through my mind: "Where are the Selachites? What will they do? Shall we ever get to that tunnel? Is Cavor far behind? Are they likely to cut him off?" Then whack, stride, and off again for another step.

I saw a Selachite running in front of me, his legs going exactly as a man's would go on earth, saw him glance over his shoulder, and heard him shriek as he ran aside out of my way into the darkness. He was, I think, our guide, but I am not sure. Then in another vast stride the walls of rock had come into view on either hand, and in two more strides I was in the tunnel, and tempering my pace to its low roof. I went on to a bend, then stopped and turned back, and plug, plug, plug. Cavor came into view, splashing into the stream of blue light at every stride, and grew larger and blundered into me. We stood clatching each other. For a moment, at least, we had shaken off our captors and were alone.

We were both very much out of breath. We spoke in gasping, broken sentences.

"You're spoilt it all!" panted Cavor.

"Nonsense," I cried. "It was that or death!"

"What are we to do?"

"Hide."

"How can we?"

"It's dark enough."

"But where?"

"Up one of these side caverns."

"And then?"

"Think."

"Right—come on."

We strode on, and presently came to a radiating dark cavern. Cavor was in front. He hesitated, and chose a black mouth that seemed to promise good hiding. He went towards it and turned.

"It's dark," he said.

"Your legs and feet will light us. You're wet with that luminous stuff."

"But——"

A tumult of sounds, and in particular a sound like a clanging gang, advancing up the main tunnel, became audible. It was horribly suggestive of a tumultuous pursuit. We made a bolt for the small side cavern forthwith. As we ran along it our way was lit by the irradiation of Cavor's legs. "It's lucky," I panted, "they took off our boots, or we should fill this place with clutter." On we rushed, taking as small steps as we could to avoid striking the roof of the cavern. After a time we seemed to be gaining on the uproar. It became muffled, it dwindled, it died away.

I stopped and looked back, and I heard the pad, pad of Cavor's feet receding. Then he stopped also. "Bedford," he whispered; "there's a sort of light in front of us."

I looked, and at first could see nothing. Then I perceived his head and shoulders dimly outlined against a fainter darkness. I saw, also, that this mitigation of the darkness was not blue, as all the other light within the moon had been, but a pallid grey, a very vague, faint white, the daylight colour. Cavor noted this difference as soon, or sooner, than

I did, and I think too, that it filled him with much the same wild hope.

"Bedford," he whispered, and his voice trembled. "That light—it is possible——"

He did not dare to say the thing he hoped. Then came a pause. Suddenly I knew by the sound of his feet that he was striding towards that pallor. I followed him with a beating heart.

## CHAPTER XVI

### Points of View

THE light grew stronger as we advanced. In a little time it was nearly as strong as the phosphorescence on Cavor's legs. Our tunnel was expanding into a cavern, and this new light was at the further end of it. I perceived something that set my hopes leaping and bounding.

"Cavor," I said, "it comes from above! I am certain it comes from above!"

He made no answer, but hurried on.

Indisputably it was a gray light, a silvery light.

In another moment we were beneath it. It filtered down through a chink in the walls of the cavern, and as I stared up, drip, came a drop of water upon my face. I started and stood aside—drip, fell another drop quite audibly on the rocky floor.

"Cavor," I said, "if one of us lifts the other, he can reach that crack!"

"I'll lift you," he said, and incontinently hoisted me as though I was a baby.

I thrust an arm into the crack, and just at my finger tips found a little ledge by which I could hold. I could see the white light was very much brighter now. I pulled myself up by two fingers with scarcely an effort, though on earth I weigh twelve stone, reached to a still higher corner of rock, and so got my feet on the narrow ledge. I stood up and searched up the rocks with my fingers; the cleft broadened out upwardly. "It's climbable," I said to Cavor. "Can you jump up to my hand if I hold it down to you?"

I wedged myself between the sides of the cleft, rested knee and foot on the ledge, and extended a hand. I could not see Cavor, but I could hear the rustle of his movements as he crouched to spring. Then whack and he was hanging to my arm—and no heavier than a kitten! I lugged him up until he had a hand on my ledge, and could release me.

"Confound it!" I said, "any one could be a mountaineer on the moon;" and so set myself in earnest to the climbing. For a few minutes I clambered steadily, and then I looked up again. The cleft opened out steadily, and the light was brighter. Only——

It was not daylight after all!

In another moment I could see what it was, and at the sight I could have beaten my head against the rocks with disappointment. For I beheld simply an irregularly sloping open space, and all over its sloping floor stood a forest of little dish-shaped fungi, each shining gloriously with that pinkish silvery light. For a moment I stared at their soft radiance, then sprang forward and upward among them. I plucked up half a dozen and

flung them against the rocks, and then sat down, laughing bitterly, as Cover's red face came into view.

"It's phosphorescence again!" I said. "No need to hurry. Sit down and make yourself at home." And as he spluttered over our disappointment, I began to loth more of these greenish into the cleft.

"I thought it was daylight," he said.

"Daylight!" cried I. "Daybreak, sunset, clouds, and windy skies! Shall we ever see such things again?"

As I spoke, a little picture of our world seemed to rise before me, bright and little and clear, like the background of some old Italian picture. "The sky that changes, and the sea that changes, and the hills and the green trees and the towns and cities shining in the sun. Think of a wet roof at sunset, Cover! Think of the windows of a westward house!" He made no answer.

"Here we are hurrowing in this heavenly world that isn't a world, with its inky ocean hidden in some abominable blackness below, and outside that torrid day and that death stillness of night. And all these things that are chasing us now, heavenly men of leather— insect men, that come out of a nightmare! After all, they're right! What business have we here smashing them and disturbing their world! For all we know the whole planet is up and after us already. In a minute we may hear them whimpering, and their gangs going. What are we to do? Where are we to go? Here we are as comfortable as snakes from Jamrach's house in a Sarban villa!"

"It was your fault," said Cover.

"My fault!" I shouted. "Good Lord!"

"I had an idea!"

"Curse your ideas!"

"If we had refused to badge—"

"Under these goods?"

"Yes. They would have carried us!"

"Over that bridge?"

"Yes. They must have carried us from outside."

"Id! Rather be carried by a fly across a ceiling."

"Good Heavens!"

I resumed my destruction of the fungi. Then suddenly I saw something that struck me even then.

"Cover," I said, "these chains are of gold!"

He was thinking intently, with his hands gripping his cheeks. He turned his head slowly and stared at me, and when I had repeated my words, at the twisted chain about his right hand. "So they are," he said, "so they are." His face lost its transitory interest even as he looked. He hesitated for a moment, then went on with his interrupted meditation. I sat for a space passing over the fact that I had only just observed this, until I considered the blue light in which we had been, and which had taken all the colour out of the metal. And from that discovery I also started upon a train of thought that carried me wide and far. I forgot that I had just been asking what business we had in the moon. Gold—

It was Cover who spoke first. "It seems to me that there are two courses open to us."

"Well?"

"Either we can attempt to make our way—fight our way if necessary—out to the exterior again, and then hunt for our sphere until we find it, or—the cold of the night comes to kill us, or else—"

He paused. "Yes?" I said, though I knew what was coming.

"We might attempt once more to establish some sort of understanding with the minds of the people in the moon."

"So far as I'm concerned—it's the first."

"I doubt."

"I don't."

"You see," said Cover, "I do not think we can judge the Selenites by what we have seen of them. Their central world, their civilized world will be far below in the profounder caverns about their sea. This region of the coast in which we are is an outlying district, a pastoral region. At any rate, that is my interpretation. These Selenites we have seen may be only the equivalent of cowboys and engine-tenders. Their use of goods—in all probability mooned goods—the lack of imagination they show in expecting us to be able to do just what they can do, their indisputable brutality, all seem to point to something of that sort. But if we en-  
dured—"

"Neither of us could endure a six-inch plank across the bottomless pit for very long."

"No," said Cover; "but then—"

"I needn't" I said.

He discovered a new line of possibilities. "Well, suppose we got ourselves into some corner, where we could defend ourselves against these kinds and labourers. If, for example, we could hold out for a week or so, it is probable that the minds of our appearance would filter down to the more intelligent and populous parts—"

"If they exist."

"They must exist, or whence come these tremendous machines?"

"That's possible, but it's the worst of the two chances."

"We might write up inscriptions on walls—"

"How do we know their eyes would see the sort of marks we made?"

"If we cut them—"

"That's possible, of course."

I took up a new thread of thought. "After all," I said, "I suppose you don't think these Selenites so infinitely wiser than men."

"They must know a lot more—or at least a lot of different things."

"Yes, but—" I hesitated.

"I think you'll quite admit, Cover, that you're rather an exceptional man."

"How?"

"Well, you—you're a rather lonely man—have been, that is. You haven't married."

"Never wanted to. But why—?"

"And you never grew richer than you happened to be?"

"Never wanted that either."

"You've just rooted out knowledge?"

"Well, a certain curiosity is natural—"

"You think so. That's just it. You think every other mind wants to know. I remember once, when

I asked you why you conducted all these researches, you said you wanted your F.R.S., and to have the stuff called Cavorite, and things like that. You know perfectly well you didn't do it for that; but at the time my question took you by surprise, and you felt you ought to have something to look like a motive. Really you conducted researches because you had to. It's your twist."

"Perhaps it is——"

"It isn't one man in a million has that twist. Most men want—well, various things, but very few want knowledge for its own sake. I don't, I know perfectly well. Now, these Selenites seem to be a driving, busy sort of being, but how do you know that even the most intelligent will take an interest in us or our world? I don't believe they'll even know we have a world. They never come out at night—they'd freeze if they did. They've probably never seen any heavenly body at all except the blazing sun. How are they to know there is another world? What does it matter to them if they do? Well, even if they have had a glimpse of a few stars, or even of the earth crescent, what of that? Why should people living inside a planet trouble to observe that sort of thing? Men wouldn't have done it except for the seasons and sailing; why should the moon people? . . ."

"Well, suppose there are a few philosophers like yourself. They are just the very Selenites who'll never have heard of our existence. Suppose a Selenite had dropped on the earth when you were at Lympce, you'd have been the last man in the world to hear he had come. You never read a newspaper! You see the chances against you. Well, it's for those chances we're sitting here doing nothing while precious time is flying. I tell you we've got into a fix. We've come unarmed, we've lost our sphere, we've got no food, we've shown ourselves to the Selenites, and made them think we're strange, strong, dangerous animals; and unless these Selenites are perfect fools, they'll set about now and hunt us till they find us, and when they find us they'll try to take us if they can, and kill us if they can't, and that's the end of the matter. If they take us, they'll probably kill us, through some misunderstanding. After we're done for, they may discuss us perhaps, but we shan't get much fun out of that."

"Go on."

"On the other hand, here's gold knocking about like cast iron at home. If only we can get some of it back, if only we can find our sphere again before they do, and get back, then——"

"Yes?"

"We might put the thing on a sounder footing. Come back in a bigger sphere with guns."

"Good Lord!" cried Cavor, as though that was horrible.

I shied another luminous fungus down the cleft. "Look here, Cavor," I said, "I've half the voting power anyhow in this affair, and this is a case for a practical man. I'm a practical man, and you are not. I'm not going to trust to Selenites and geometrical diagrams again, if I can help it. . . . That's all. Get back. Drop all this secrecy—or most of it. And come again."

He reflected. "When I came to the moon," he said, "I ought to have come alone."

"The question before the meeting," I said, "is how to get back to the earthly sphere."

For a time we nursed our knees in silence. Then he seemed to decide for my reasons.

"I think," he said, "one can get data. It is clear that while the sun is on this side of the moon the air will be blowing through this planet sponge from the dark side hither. On this side, at any rate, the air will be expanding and flowing out of the moon sewers into the craters. . . . Very well, there's a draught here."

"So there is."

"And that means that this is not a dead end; somewhere behind us this cleft goes on and up. The draught is blowing up, and that is the way we have to go. If we try to get up any sort of chimney or gully there is, we shall not only get out of these passages where they are hunting for us——"

"But suppose the gully is too narrow?"

"We'll come down again."

"Sch!" I said suddenly; "what's that?"

We listened. At first it was an indistinct murmur, and then one picked out the clang of a gong. "They must think we are moonbees," said I, "to be frightened at that."

"They're coming along that passage," said Cavor.

"They must be."

"They'll not think of the cleft. They'll go past."

I listened again for a space. "This time," I whispered, "they're likely to have some sort of weapon."

Then suddenly I sprang to my feet. "Good heavens, Cavor!" I cried. "But they will! They'll see the fungi I have been pitching down. They'll——!"

I didn't finish my sentence. I turned about and made a leap over the fungus tops towards the upper end of the cleft. I saw that the space turned upward and became a draughty cleft again, according to impenetrable darkness. I was about to clamber up into this, and then with a happy inspiration turned back.

"What are you doing?" asked Cavor.

"Go on!" said I, and went back and got two of the shining fungi, and putting one into the breast pocket of my flannel jacket, so that it stuck out to light our climbing, went back with the other for Cavor. The noise of the Selenites was now so loud that it seemed they must be already beneath the cleft. But it might be they would have difficulty in clambering into it, or might hesitate to ascend it against our possible resistance. At any rate, we now had the comforting knowledge of the enormous muscular superiority our birth in another planet gave us. In another minute I was clambering with gigantic vigour after Cavor's blue-lit heels.

## CHAPTER XVII

### The Fight in the Cave of the Moon Butchers

I DO not know how far we clambered before we came to the grating. It may be we ascended only a few hundred feet; but at the time it

seemed to me we might have bawled and jammed and hopped and wedged ourselves through a mile or more of vertical ascent. Whenever I recall that time, there comes into my head the heavy clank of our golden chains that followed every movement. Very soon my knuckles and knees were raw, and I had a bruise on one cheek. After a time the first violence of our efforts diminished, and our movements became more deliberate and less painful. The noise of the pursuing Selenites had died away altogether. It seemed almost as though they had not traced us up the crack after all, in spite of the tall-tale heap of broken fungi that must have lain beneath it. At times the shaft narrowed so much that we could scarce squeeze up it; at other times it expanded into great cavities, studded with prickly crystals, or thickly beset with dull, shining fungoid pimples. Sometimes it twisted spirally, and at other times slanted down nearly to the horizontal direction. Ever and again there was the intermittent drip and trickle of water by us. Once or twice it seemed to us that small living things had rustled out of our reach, but what they were we never saw. They may have been venomous beasts for all I know, but they did us no harm, and we were now tuned to a pitch when a weird creeping thing more or less mattered little. And at last, far above, came the familiar bluish light again, and then we saw that it filtered through a grating that barred our way.

We whispered as we pointed this out to one another, and became more and more cautious in our ascent. Presently we were close under the grating, and by pressing my face against its bars I could see a limited portion of the cavern beyond. It was clearly a large space, and lit no doubt by some rivulet of the same blue light that we had seen flow from the hasting machinery. An intermittent trickle of water dropped over and again between the bars near my face.

My first endeavour was naturally to see what might be upon the floor of the cavern, but our grating lay in a depression whose rim hid all this from our eyes. Our foiled attention then fell back upon the suggestion of the various sounds we heard, and presently my eye caught a number of faint shadows that played across the dim roof far overhead.

Indisputably there were several Selenites, perhaps a considerable number, in this space, for we could hear the notes of their intercourse, and faint sounds that I identified as their footsteps. There was also a succession of regularly repeated sounds—child, child, child—which began and ceased, suggestive of a knife or spade hacking at some soft substance. Then came a clunk as if of chains, a whistle and a rumble as of a truck running over a hollowed place, and then again that child, child, child resumed. The shadows told of shapes that moved quickly and rhythmically, in agreement with that regular sound, and rested when it ceased.

We put our heads close together, and began to discuss these things in nervous whispers.

"They are occupied," I said, "they are occupied in some way."

"Yes."

"They're not seeking us, or thinking about us,"

"Perhaps they have not heard of us."

"Those others are hunting about below. If suddenly we appeared here——"

We looked at one another.

"There might be a chance to parley," said Cavor.

"No," I said. "Not as we are."

For a space we remained, each occupied by his own thoughts.

Child, child, child went the chapping, and the shadows moved to and fro.

I looked at the grating. "It's dimmy," I said. "We might bend two of the bars and crawl through."

We wasted a little time in vague discussion. Then I took one of the bars in both hands, and got my feet up against the rock until they were almost on a level with my head, and so thrust against the bar. It bent so suddenly that I almost slipped. I clambered about and bent the adjacent bar in the opposite direction, and then took the luminous fungus from my pocket and dropped it down the fissure.

"Don't do anything hastily," whispered Cavor, as I twisted myself up through the opening I had enlarged. I had a glimpse of busy figures as I came through the grating, and immediately bent down, so that the rim of the depression in which the grating lay hid me from their eyes, and so lay flat, signalling advice to Cavor as he also prepared to come through. Presently we were side by side in the depression, peering over the edge at the cavern and its occupants.

It was a much larger cavern than we had supposed from our first glimpse of it, and we looked up from the lowest portion of its sloping floor. It widened out as it receded from us, and its roof came down and hid the remainder portion altogether. And lying in a line along its length, vanishing at last far away in that tremendous perspective, were a number of huge shapes, huge pallid balls, upon which the Selenites were busy. At first they seemed big white cylinders of vague import. Then I noted the heads upon them lying towards us, eyes and skinless like the heads of sheep at a butcher's, and perceived they were the carcasses of mooncalves being cut up, much as the crew of a whaler might cut up a morred whale. They were cutting off the flesh in strips, and on some of the further trunks the white ribs were showing. It was the sound of their hatchets that made that child, child. Some distance away a thing like a trolley cable, drawn and loaded with chunks of lex meat, was running up the slope of the cavern floor. This enormous long avenue of bulls that were destined to be food, gave us a sense of the vast populousness of the moon-world second only to the effect of our first glimpses down the shaft.

It seemed to me at first that the Selenites must be standing on trestle-supported planks,\* and then I saw that the planks and supports and their hatchets were really of the same leaden hue as my

\* I do not remember seeing any wooden things on the moon down, tables, everything corresponding to our terrestrial machinery was made of metal, and I suppose for the most part of gold, which as a metal would, of course, naturally recommend itself rather than to brass or steel. A number of the sides in cutting it, and in roughing and dressing.

figures had seemed before white light came to bear on them. A number of very thick-looking crowbars lay about the floor, and had apparently assisted to turn the dead moonself over on its side. They were perhaps six feet long, with shaped handles, very tempting-looking weapons. The whole place was lit by three transverse streams of the blue fluid.

We lay for a long time noting all these things in silence. "Well?" said Caver at last.

I crouched lower and turned to him. I had come upon a brilliant idea. "Unless they lowered those bodies by a crane," I said, "we must be nearer the surface than I thought."

"Why?"

"The moonself doesn't bop, and it hasn't got wings."

He peered over the edge of the hollow again. "I wonder now . . ." he began. "After all, we have never gone far from the surface——"

I stopped him by a grip on his arm. I had heard a noise from the chert below us!

We twisted ourselves about, and lay as still as death with every sense alert. In a little while I did not doubt that something was quietly ascending the cleft. Very slowly and quite noiselessly I secured myself of a good grip on my chain, and waited for that something to appear.

"Test look at those chaps with the hatchets again," I said.

"They're all right," said Caver.

I took a sort of provisional aim at the gap in the grating. I could hear now quite distinctly the soft twittering of the ascending Selenites, the dab of their hands against the rocks, and the falling of dust from their grips as they clambered.

Then I could see that there was something moving dimly in the blackness below the grating, but what it might be I could not distinguish. The whole thing seemed to hang fire just for a moment—then smash! I had sprung to my feet, struck savagely at something that had flashed out at me. It was the keen point of a spear. I have thought since that its length in the narrowness of the cleft must have prevented its being sloped to reach me. Anyhow, it shot out from the grating like the tongue of a snake, and missed and flew back and flashed again. But the second time I snatched and caught it, and wrenched it away, but not before another had darted ineffectually at me.

I shouted with triumph as I felt the hold of the Selenite resist my pull for a moment and give, and then I was jabbing down through the bars, amidst squeals from the darkness, and Caver had snipped off the other spear, and was leaping and flourishing it beside me, and making inefficient jabs. Clang, clang, came up through the grating, and then an axe hurtled through the air and whacked against the rocks beyond, to remind me of the flashes at the carcasses up the cavern.

I turned, and they were all coming towards us in open order waving their axes. They were short, thick, little buggers, with long arms, strikingly different from the ones we had seen before. If they had not heard of us before, they must have realized the situation with incredible swiftness. I stared

at them for a moment, spear in hand. "Guard that grating, Caver," I cried, howled to intimidate them, and rushed to meet them. Two of them mixed with their hatchets, and the rest fled incontinently. Then the two also were sprinking away up the cavern, with hands clenched and heads down. I never saw men run like them!

I knew the spear I had was no good for me. It was thin and dimmy, only effective for a thrust, and too long for a quick recover. So I only chased the Selenites as far as the first carcass, and stopped there and picked up one of the crowbars that were lying about. It felt comfortably heavy, and equal to smashing any number of Selenites. I threw away my spear, and picked up a second crowbar for the other hand. I felt five times better than I had with the spear. I shook the two threateningly at the Selenites, who had come to a halt in a little crowd far away up the cavern, and then turned about to look at Caver.

He was leaping from side to side of the grating, making threatening jabs with his broken spear. That was all right. It would keep the Selenites down—for a time at any rate. I looked up the cavern again. What on earth were we going to do now?

We were cornered in a sort of way already. But these hatchets up the cavern had been surprised, they were probably scared, and they had no special weapons, only those little hatchets of theirs. And that way lay escape. Their sturdy little forms—ever so much shorter and thicker than the moon-calf herders—were scattered up the slope in a way that was eloquent of indecision. I had the moral advantage of a road half in a street. But for all that, there seemed a tremendous crowd of them. Very probably there was. Those Selenites down the cleft had certainly some infernally long spears. It might be they had other surprises for us. . . . But, confound it! if we charged up the cave we should let them up behind us, and if we didn't those little brutes up the cave would probably get reinforced. Heaven alone knew what tremendous engines of warfare—guns, bombs, terrestrial torpedoes—this unknown world below our feet, this vast world of which we had only pricked the outer article, might not presently send up to our destruction. It became clear that the only thing to do was to charge! It became clearer as the legs of a number of fresh Selenites appeared running down the cavern towards us.

"Bedford!" cried Caver, and behold! he was half-way between me and the grating.

"Go back!" I cried. "What are you doing——?"

"They've got—it's like a gun!"

And struggling in the grating between these defensive spears appeared the head and shoulders of a singularly lean and angular Selenite, bearing some complicated apparatus.

I realized Caver's utter inexperience for the fight we had in hand. For a moment I hesitated. Then I rushed past him whirling my crowbars, and shouting to confound the aim of the Selenite. He was aiming in the queerest way with the thing against his stomach. "Chaaa!" The thing wasn't a gun;



it went off like a cross-bow mare, and dropped me in the middle of a leap.

I didn't fall down, I simply came down a little shorter than I should have done, if I hadn't been hit, and from the feel of my shoulder the thing might have tapped me and glanced off. Then my left hand hit the shaft again and I perceived there was a sort of spear sticking half through my shoulder. The moment after I got home with the crowbar in my right hand, and hit the Selenite fair and square. He collapsed—he crunched and crumpled—his head smashed like an egg.

I dropped a crowbar, pulled the spear out of my shoulder, and began to jab it down the grating into the darkness. At each jab came a shriek and twitter. Finally I hurled the spear down upon them with all my strength, kept up, picked up the crowbar again, and started for the multitude up the cavern.

"Bedford!" cried Cavor. "Bedford!" as I flew past him.

I seem to remember his footsteps coming on behind me.

Step, leap . . . whence, step, leap . . . Each leap seemed to last ages. With each, the cove opened out and the number of Selenites visible increased. At first they seemed all running about like ants in a disturbed ant-hill, one or two waving hatchets and coming to meet me, more running away, some bolting sideways into the avenue of carcases, then presently others came in sight carrying spears, and then others. I saw a most extraordinary thing, all hands and feet, bolting for cover. The cavern grew darker further up. Flick! something flew over my head. Flick! As I scored in mid-stride I saw a spear hit and quiver in one of the carcasses to my left. Then, as I came down, one hit the ground before me, and I heard the remote chums! with which their things were fired. Flick, flick! for a moment it was a shower. They were volleying!

I stopped dead.

I don't think I thought clearly then. I seem to remember a kind of stereotyped phrase running through my mind: "Zone of fire, seek cover!" I knew I made a dash for the space between two of the carcasses, and stood there panting and feeling very wicked.

I looked round for Cavor, and for a moment it seemed as if he had vanished from the world. Then he came out of the darkness between the row of the carcasses and the rocky wall of the cavern. I saw his little face, dark and blue, and shining with perspiration and emotion.

He was saying something, but what it was I did not heed. I had realized that we might work from mooncalf to mooncalf up the cave until we were near enough to charge home. It was charge or nothing. "Come on!" I said, and led the way.

"Bedford!" he cried unwillingly.

My mind was busy as we went up that narrow alley between the dead bodies and the wall of the cavern. The rocks curved about—they could not enclose us. Though in that narrow space we could not leap, yet with our earth-born strength we were still able to go very much faster than the Selenites.

I reckoned we should presently come right among them. Once we were on them, they would be nearly as formidable as black beetles. Only!—there would first of all be a valley. I thought of a stratagem. I whipped off my flannel jacket as I ran.

"Bedford!" panted Cavor behind me.

I glanced back, "What?" said I.

He was pointing upward over the earcasses.

"White light!" he said. "White light again!"

I looked, and it was even so, a faint white ghost of twilight in the remote cavern roof. That seemed to give me double strength.

"Keep close," I said. A fat, long Selenite dashed out of darkness, and squealed and fled. I halted, and stopped Cavor with my hand. I hung my jacket over my crowbar, ducked round the next carcass, dropped jacket and crowbar, showed myself, and darted back.

"Chums—flick," just one arrow came. We were close on the Selenites, and they were standing in a crowd, broad, short, and tall together, with a little battery of their shooting implements pointing down the cove. Three or four other arrows followed the first, and then their fire ceased.

I stuck out my head, and escaped by a hair's-breadth. This time I drew a dozen shots or more, and heard the Selenites shouting and twittering as if with excitement as they shot. I picked up jacket and crowbar again.

"Now!" said I, and thrust out the jacket.

"Chums—coo—coo! Chums! In an instant my jacket had grown a thick beard of arrows, and they were quivering all over the carcass behind us. Instantly I slipped the crowbar out of the jacket, dropped the jacket—for all I knew to the contrary it is lying up there in the moon now—and rushed out upon them.

For a minute perhaps it was massacre. I was too fierce to discriminate, and the Selenites were probably too scared to fight. At any rate they made no sort of fight against me. I saw scarlet, as the saying is. I remember I seemed to be wading among these leathery, thin things as a man wades through tall grass, mowing and hitting, first right, then left; smash, smash. Little drops of moisture flew about. I trod on things that crunched and piped and went slippery. The crowd seemed to open and close and flow like water. They seemed to have no combined plan whatever. Spears flew about me. I was grazed over the ear by one. I was stabbed once in the arm and once in the cheek, but I only found that out afterwards, when the blood had had time to run and cool and feel wet.

What Cavor did I do not know. For a space it seemed that this fighting had lasted for an age, and must needs go on for ever. Then suddenly it was all over, and there was nothing to be seen but the backs of heads bobbing up and down as their owners ran in all directions. . . . I seemed altogether unharmed. I ran forward some paces, shouting, then turned about. I was amazed.

I had come right through them in vast flying strides, they were all behind me, and running hither and thither to hide.

I felt an enormous astonishment at the cavern. Too of the great fight into which I had hurried

myself, and not a little of exultation. It did not seem to me that I had discovered the Solenites were unexpectedly slimy, but that I was unexpectedly strong. I laughed stupidly. This fantastic moon!

I glanced for a moment at the smashed and writhing bodies that were scattered over the cavern floor, with a vague idea of further violence, then hurried on after Cavor.

## CHAPTER XVIII

### In the Sunlight

**P**RESENTLY we saw that the cavern before us opened on a hazy void. In another moment we had emerged upon a sort of slanting gallery, that projected into a vast circular space, a huge cylindrical pit running vertically up and down. Round this pit the slanting gallery ran without any parapet or protection for a turn and a half, and then plunged high above into the rock again. Somehow it reminded me then of one of those spiral turns of the railway through the Saint Gothard. It was all tremendously huge. I can scarcely hope to convey to you the Titanic proportion of all that place, the Titanic effect of it. Our eyes followed up the vast declivity of the pit wall, and overhead and far above we beheld a round opening set with faint stars, and half of the lip about it well-nigh blinding with the white light of the sun. At that we cried aloud simultaneously.

"Come on!" I said, leading the way.

"But there?" said Cavor, and very carefully stopped nearer the edge of the gallery. I followed his example, and craned forward and looked down, but I was dazzled by that gleam of light above, and I could see only a bottomless darkness with spectral patches of crimson and purple floating therein. Yet if I could not see, I could hear. Out of this darkness came a sound, a sound like the angry hum one can hear if one puts one's ear outside a hive of bees, a sound out of that enormous hollow, it may be, four miles beneath our feet. . . .

For a moment I listened, then tightened my grip on my crowbar, and led the way up the gallery.

"This must be the shaft we looked down upon," said Cavor. "Under that lid."

"And below there, is where we saw the lights."

"The lights?" said he. "Yes—the lights of the world that now we shall never see."

"We'll come back," I said, for now we had escaped so much I was really conscious that we should recover the sphere.

His answer I did not catch.

"Eh?" I asked.

"It doesn't matter," he answered, and we hurried on in silence.

I suppose that slanting lateral way was four or five miles long, allowing for its curvature, and it ascended at a slope that would have made it almost impossibly steep on earth, but which one strode up easily under lunar conditions. We saw only two Solenites during all that portion of our flight, and directly they became aware of us they ran headlong. It was clear that the knowledge of our strength and violence had reached them. Our way to the exterior was unexpectedly plain. The spiral

gallery straightened into a steeply ascendent tunnel, its floor bearing abundant traces of the mooncalves, and so straight and short in proportion to its vast arch, that no part of it was absolutely dark. Almost immediately it began to lighten, and then far off and high up, and quite blindingly brilliant, appeared its opening on the exterior, a slope of Alpine steepness surmounted by a crest of bayonet shrub, tall and broken down now, and dry and dead, in spiky silhouette against the sun.

And it is strange that we men, to whom this very vegetation had seemed so weird and horrible a little time ago, should now behold it with the emotion a home-coming exile might feel at sight of his native land. We welcomed even the rareness of the air that made as pant as we ran, and which rendered speaking no longer the easy thing that it had been, but an effort to make oneself heard. Larger grew the small circle above us, and larger, and all the nearer tunnel took into a rim of indistinguishable black. We saw the dead bayonet shrub no longer with any touch of green in it, but brown and dry and thick, and the shadow of its upper branches high out of sight made a densely interlaced pattern upon the tumbled rocks. And at the immediate mouth of the tunnel was a wide trampled space where the mooncalves had come and gone.

We came out upon this space at last into a light and heat that hit and pressed upon us. We traversed the exposed area painfully, and clambered up a slope among the scrub stems, and sat down at last peering in a high place beneath the shadow of a mass of twisted lava. Even in the shade the rock felt hot.

The air was intensely hot, and we were in great physical discomfort, but for all that we were no longer in a nightmare. We seemed to have come to our own province again, beneath the stars. All the fear and stress of our flight through the dim passages and fissures below had fallen from us. That last fight had filled us with an enormous confidence in ourselves so far as the Solenites were concerned. We looked back almost incredulously at the black opening from which we had just emerged. Down there it was, in a blue glow that now in our memories seemed the next thing to absolute darkness, we had met with things like mad mockeries of men, helmet-headed creatures, and had walked in fear before them, and had submitted to them until we could submit no longer. And behold, they had smashed like wax and scattered like dust, and fled and vanished like the creatures of a dream!

I rubbed my eyes, doubting whether we had not slept and dreamt these things by reason of the fungus we had eaten, and suddenly discovered the blood upon my face, and then that my shirt was sticking painfully to my shoulder and arm.

"Confound it!" I said, gauging my injuries with an investigatory hand, and suddenly that distant tunnel mouth became, as it were, a watching eye.

"Cavor!" I said; "what are they going to do now? And what are we going to do?"

He shook his head, with his eyes fixed upon the tunnel. "How can one tell what they will do?"

"It depends on what they think of us, and I don't see how we can begin to guess that. And it depends upon what they have in reserve. It's as you say, Cavor, we have touched the merest outside of this world. They may have all sorts of things inside here. Even with those shooting things they might make it bad for us. . . .

"Yet after all," I said, "even if we don't find the sphere at once, there is a chance for us. We might hold out. Even through the night. We might go down there again and make a fight for it."

I stared about me with speculative eyes. The character of the scenery had altered altogether by reason of the enormous growth and subsequent drying of the scrub. The crest on which we sat was high, and commanded a wide prospect of the crater landscape, and we saw it now all bare and dry in the late autumn of the lunar afternoon. Rising one behind the other were long slopes and fields of trampled brown where the mooncalves had pastured, and far away in the full blaze of the sun a drove of them basked slumberously, scattered shapes, each with a blot of shadow against it like sheep on the side of a down. But never a sign of a Solomite was to be seen. Whether they had fled on our emergence from the interior passages, or whether they were accustomed to retire after driving out the mooncalves, I cannot guess. At the time I believed the former was the case.

"If we were to set fire to all this stuff," I said, "we might find the sphere among the ashes."

Cavor did not seem to hear me. He was peering under his hand at the stars, that still, in spite of the intense sunlight, were abundantly visible in the sky? "How long do you think we have been here?" he asked at last.

"Been where?"

"On the moon."

"Two earthly days, perhaps."

"More nearly ten. Do you know, the sun is past its zenith, and sinking in the west. In four days' time or less it will be night."

"But—we've only eaten once!"

"I knew that. And—— But there are the stars!"

"But why should time seem different because we are on a smaller planet?"

"I don't know. There it is!"

"How does one tell time?"

"Hunger—fatigue—all those things are different. Everything is different—everything. To me it seems that since first we came out of the sphere has been only a question of hours—long hours—at most."

"Ten days," I said; "that leaves——" I looked up at the sun for a moment, and then saw that it was halfway from zenith to the western edge of things. "Four days! . . . Cavor, we mustn't sit here and dream. How do you think we may begin?"

I stood up. "We must get a fixed point we can recognize—we might hoist a flag, or a handkerchief, or something—and quarter the ground, and work round that."

He stood up beside me.

"Yes," he said, "there is nothing for it but to

hunt the sphere. Nothing. We may find it—certainly we may find it. And if not——"

"We must keep on looking."

He looked this way and that, glanced up at the sky and down at the tunnel, and astonished me by a sudden gesture of impatience. "Oh! but we have done foolishly! To have come to this pass! Think how it might have been, and the things we might have done!"

"We may do something yet."

"Never the thing we might have done. Here below our feet is a world. Think of what that world must be! Think of that machine we saw, and the lid and the shaft! They were just remote ordinary things, and those creatures we have seen and fought with no more than ignorant peasants, dwellers in the outskirts, peasants and labourers half akin to brutes. Down below! Caverns beneath caverns, tunnels, structures, ways. . . . It must open out, and be greater and wider and more populous as one descends. Assuredly. Right down at least to the central sea that washes round the core of the moon. Think of its ink waters under the spare lights—if, indeed, their eyes need light! Think of the cascading tributaries pouring down their channels to feed it! Think of the tides upon its surface, and the rush and swirl of its ebb and flow! Perhaps they have ships that go upon it, perhaps down there are mighty cities and swarming ways, and wisdom and order pouring the wit of man. And we may die here upon it, and never see the masters who must be—ruling over these things! We may freeze and die here, and the air will freeze and thaw upon us, and then——! Then they will come upon us, come on our stiff and silent bodies, and find the sphere we cannot find, and they will understand at last too late all the thought and effort that ended here in vain!"

His voice for all that speech sounded like the voice of some one heard in a telephone, weak and far away.

"But the darkness," I said.

"One might get over that."

"How?"

"I don't know. How am I to know? One might carry a torch, one might have a lamp—— The others—might understand."

He stood for a moment with his hands held down and a rueful frown, staring out over the waste that defied him. Then with a gesture of resignation he turned towards me with proposals for the systematic hunting of the sphere.

"We can return," I said.

He looked about him. "First of all we shall have to get to earth."

"We could bring back lamps to carry and climbing ladders, and a hundred necessary things."

"Yes," he said.

"We can take back an earnest of success in this gold."

He looked at my golden crowbars, and said nothing for a space. He stood with his hands clasped behind his back, staring across the crater. At last he sighed and spoke. "It was I found the way here, but to find a way isn't always to be master of a way. If I take my secret back to earth, what will

happen? I do not see how I can keep my secret for a year, for even a part of a year. Sooner or later it must come out, even if other men rediscover it. And then, . . . Governments and powers will struggle to get better, they will fight against one another, and against these moon people; it will only spread warfare and multiply the occasions of war. In a little while, in a very little while, if I tell my secret, this planet to its deepest galleries will be strewn with human dead. Other things are doubtful, but that is certain. . . . It is not as though man had any use for the moon. What good would the moon be to man? Even of their own planet what have they made but a battle-ground and theatre of infinite folly? Small as his world is, and short as his time, he has still in his little life done there far more than he can do. Not Science has toiled too long forging weapons for fools to use. It is time she held her hand. Let him find it out for himself again—in a thousand years' time."

"There are methods of secrecy," I said.

He looked up at me and smiled. "After all," he said, "why should one worry? There is little chance of our finding the sphere, and down below things are brewing. It's simply the human habit of hoping till we die that makes us think of return. Our troubles are only beginning. We have shown these moon folk violence, we have given them a taste of our quality, and our chances are about as good as a tiger's that has got loose and killed a man in Hyde Park. The news of us must be running down from gallery to gallery, down towards the central parts. . . . No sane beings will ever let us take that sphere back to earth after so much as they have seen of us."

"We aren't improving our chances," said I, "by sitting here."

We stood up side by side.

"After all," he said, "we must separate. We must stick up a handkerchief on those tall spikes here and fasten it firmly, and from this as a centre we must work over the crater. You must go westward, moving out in semicircles to and fro towards the setting sun. You must move first with your shadow on your right until it is at right angles with the direction of your handkerchief, and then with your shadow on your left. And I will do the same to

the east. We will look into every gully, examine every slurry of rocks; we will do all we can to find my sphere. If we see the Selenites we will hide from them as well as we can. For drink we must take snow, and if we feel the need of food, we must kill a mooncalf if we can, and eat such flesh as it has—raw—and so each will go his own way."

"And if one of us comes upon the sphere?"

"He must come back to the white handkerchief, and stand by it and signal to the other."

"And if neither—?"

Cover glanced up at the sun. "We go on seeking until the night and cold overtake us."

"Suppose the Selenites have found the sphere and hidden it?"

He shrugged his shoulders.

"Or if presently they come hunting us?"

He made no answer.

"You had better take a club," I said.

He shook his head, and stared away from me across the waste.

But for a moment he did not start. He looked round at me shyly, hesitated. "Am *vous*?" he said.

I felt an odd stab of emotion. A sense of how we had gulped each other, and particularly how I must have gulped him, came to me. "Confound it," thought I, "we might have done better!" I was on the point of asking him to shake hands—for that, somehow, was how I felt just then—when he put his feet together and leapt away from me towards the north. He seemed to drift through the air as a dead leaf would do, fell lightly, and leapt again. I stood for a moment watching him, then faced westward reluctantly, pulled myself together, and with something of the feeling of a man who leaps into icy water, selected a leaping point, and plunged forward to explore my solitary half of the moon world. I dropped rather clumsily among rocks, stood up and looked about me, clambered on to a rocky slab, and leapt again. . . .

When presently I looked for Cover he was hidden from my eyes, but the handkerchief showed out bravely on its headland, white in the black of the sun.

I determined not to lose sight of that handkerchief whatever might befall.

## END OF PART II

## NEXT MONTH

# "The Land That Time Forgot"

By EDGAR RICE BURROUGHS



SCRIBNER has often been called dry and uninteresting, although it is instructive that in the popular story of "The Land That Time Forgot" we have one of the most beautiful stories ever written. Full of adventure, thrills, adventure, and good science, the book is hard to finish. The story of Taurus has no peer since it comes to maintaining your interest in almost every line throughout

the entire book. Thrills, suspense, and heart-racing situations seem to follow hand in hand. The story and the story through in two days, and since has read it at least four times at one time or another. It is unbelievable that any story could be packed full of so many thrills and heart-racing episodes as appear in this story.

# The MAN with the STRANGE HEAD

-- By Dr. Miles J. Breuer --



Amstruther leaped upon the hold-up man; the driver said he heard Amstruther's muscles stretch awfully, as with little apparent effort he flung the man over the Ford.



MAN in a gray hat stood half way down the corridor, smoking a cigar and apparently interested in my knocking and waiting. I rapped again on the door of Number 218 and waited some more, but all remained silent. Finally my observer approached me.

"I don't believe it will do any good," he said. "I've just been trying it. I would like to talk to someone who is connected with Amstruther. Are you?"

"Only this," I handed him a letter out of my pocket without comment, as one is apt to do with a thing that has caused one no little wonderment:

"Dear Doctor:" it said succinctly: "I have been under the care of Dr. Fausbourg who has recently died. I would like to have you take charge of me on a contract basis, and keep me well, instead of waiting till I get sick. I can pay you enough to make you independent, but in return for that, you will have to accept an astonishing revelation concerning me, and keep it to yourself. If this seems acceptable to you, call on me at 9 o'clock, Wednesday evening, Jacob Amstruther, Room 218, Cornhusker Hotel."

"If you have time," said the man in the gray hat, handing me back the letter, "come with me. My name is Jerry Stoner, and I make a sort of living writing for magazines. I live in 318, just above here."

"By some curious architectural accident," he continued, as we reached his room, "that ventilator there enables me to hear minutely everything that goes on in the room below. I haven't ever said anything about it during the several months that I've lived here, partly because it does not disturb me, and partly because it has begun to pique my curiosity—a writer can confess to that, can he not? The man below is quiet and orderly, but seems to work a good deal on some sort of clockwork; I can hear it whirring and clicking quite often. But listen now!"

Standing within a couple of feet of the opening which was covered with an iron grill, I could hear footsteps. They were regular, and would decrease in intensity as the person walked away from the ventilator opening below, and increase again as he approached it; were interrupted for a moment as he probably stepped on a rug; and were shorter for two or three counts, no doubt as he turned at the end of the room. This was repeated in a regular rhythm as long as I listened.

"Well?" I said.

"You perceive nothing strange about that, I suppose," said Jerry Stoner. "But if you had listened all day long to just exactly that you would begin to wonder. That is the way he was going on when I awoke this morning; I was out from 10 to 11 this forenoon. The rest of the time I have been writing steadily, with an occasional stretch at the window,

and all of the time I have heard steadily what you hear now, without interruption or change. It's getting on my nerves.

"I have called him on the phone, and have rung it on and off for twenty minutes; I could hear his bell through the ventilator, but he pays no attention to it. So, a while ago I tried to call on him. Do you know him?"

"I know who he is," I replied, "but do not remember ever having met him."

"If you had ever met him you would remember. He has a queer head. I made my curiosity concerning the sounds from his room an excuse to cultivate his acquaintance. The cultivation was difficult. He is courteous, but seemed afraid of me."

We agreed that there was not much that we could do about it. I gave up trying to keep my appointment, told Stoner that I was glad I had met him, and went home. The next morning at seven he had me on the telephone.

"Are you still interested?" he asked, and his voice was nervous. "That bird's been at it all night. Come and help me talk to the hotel management." I needed no urging.

I found Beesley, the hotel manager, with Stoner; he was from St. Louis, and looked French.

"He can do it if he wants to," he said, shrugging his shoulders comically; "unless you complain of it as a disturbance."

"It isn't that," said Stoner; "there must be something wrong with the man."

"Some form of insanity———" I suggested; "or a compulsion neurosis."

"That's what I'll be pretty soon," Stoner said.

"He is a queer gink anyway. As far as I have been able to find out, he has no close friends. There is something about his appearance that makes me shiver; his face is so wrinkled and droopy, and yet he walks about the streets with an unusually graceful and vigorous step. Learn me your pass key; I think I'm as close a friend of his as anyone."

Beesley lost the key, but Stoner was back in a few minutes, shaking his head. Beesley was expect-

ing that; he told us that when the hotel was built, Amstruther had the doors made of steel with special bars, at his own expense, and the windows shuttered, as though he were afraid for his life.

"His rooms would be as hard to break into as a

fort," Beesley said as he left us; "and thus far we do not have sufficient reason for wrecking the hotel."

"Look here!" I said to Stoner; "it will take me a couple of hours to hunt up the stuff and string up a periscope; it's an old trick I learned as a Boy Scout."

Between us we had it up in about that time; a radio aerial mast clamped on the window sill with mirrors at the top and bottom, and a telescope at our end of it, gave us a good view of the room below us. It was a sort of living room made by throwing together two of the regular sized hotel rooms.

*HERE is one of the most fantastic bits of scientific fiction we have ever read. This is a story so strange and amazing that it will keep your interest until the end. You are not permitted to leave until at the very end what it is really all about, and you will follow the proceedings with keen interest.*

Anstruther was walking across it diagonally, disappearing from our field of view at the further end, and coming back again. His head hung forward on his chest with a ghastly expression. He was a big, well-built man, with a vigorous stride. Always it was the same path. He avoided the small table in the middle each time with exactly the same sort of side step and swing. His head bumped heavily as he turned near the window and started back across the room. For two hours we watched him in shivering fascination, during which he walked with the same hideous uniformity.

"That makes thirty hours of this," said Stoner. "Wouldn't you say that there was something wrong?"

We tried another consultation with the hotel manager. As a physician, I advised that something be done; that he be put in a hospital or something. I was met with another shrug.

"How will you get him? I still do not see sufficient cause for destroying the hotel company's property. It will take dynamite to get at him."

He agreed, however, to a consultation with the police, and in response to our telephone call, the great, genial chief, Peter John Smith was soon sitting with us. He advised us against breaking in.

"A man has a right to walk that way if he wants to," he said. "Here's this fellow in the papers who played the piano for 49 hours, and the police didn't stop him; and in Germany they practice making public speeches for 18 hours at a stretch. And there was this Olympic dancing lad some months ago, where a couple danced for 87 hours."

"It doesn't look right to me," I said, shaking my head. "There seems to be something wrong with the man's appearance; some uncanny disease of the nervous system—Lord knows I've never heard of anything that resembles it!"

We decided to keep a constant watch. I had to spend a little time on my patients, but Stoner and the chief stayed, and agreed to call me if occasion arose. I peeped through the periscopes at the walking man several times during the next twenty-four hours; and it was always exactly the same, the hanging, bumping head, the uniformity of his course, the uncanny, machine-like exactitude of his movements. I spent an hour at a time with my eye at the telescope studying his movements for some variation, but was unable to be certain of any. That afternoon I looked up my neurology texts, but found no clues. The next day at 4 o'clock in the afternoon, after not less than 55 hours of it, I was there with Stoner to see the end of it; Chief Peter John Smith was out.

As we watched, we saw that he moved more and more slowly, but with otherwise identical motions. It had the effect of the slowed motion pictures of dancers or athletes; or it seemed like some curious dream; for as we watched, the sound of the steps through the ventilator also slowed and weakened. Then we saw him sway a little, and totter, as though his balance were imperfect. He swayed a few times and fell sideways on the floor; we could see one leg in the field of our periscopes moving slowly with the same movements as in walking, a

slow, dainty sort of motion. In five more minutes he was quite still.

The Chief was up in a few moments in response to our telephone call.

"Now we've got to break in," he said. Stoner shrugged his shoulders and said nothing. Stoner came to the rescue of the hotel property.

"A small man could go down this ventilator. This grill can be unscrewed, and the lower one can be knocked out with a hammer; it is cast-iron."

Stoner was gone like a flash, and soon returned with one of his window-washers, who was small and wiry, and also a rope and hammer. We took off the grill and held the rope as the man crawled in. He shouted to us as he hit the bottom. The air drew strongly downwards, but the blows of his hammer on the grill came up to us. We hurried downstairs. Not a sound came through the door of 218, and we waited for some minutes. Then there was a rattle of bars and the door opened, and a gust of cold wind struck us, with a putrid odor that made us gulp. The man had evidently run to open a window before coming to the door.

Anstruther lay on his side, with one leg straight and the other extended forward as in a stride; his feet were livid, swollen, hideous. Stoner gave him a glance, and then scouted around the room—looking for the machinery he had been hearing, but finding none. The chief and I also went over the rooms, but they were just conventional rooms, rather colorless and lacking in personality. The chief called an undertaker and also the coroner, and arranged for a post-mortem examination. I received permission to notify a number of professional colleagues; I wanted some of them to share in the investigation of this unusual case with me. As I was leaving, I could not help noting the astonished gasps of the undertaker's assistants as they lifted the body; but they were apparently too well trained to say anything.

That evening, a dozen physicians gathered around the figure covered with a white sheet on the table in the center of the undertaker's work room. Stoner was there; a writer may be anywhere he chooses. The coroner was preparing to draw back the sheet.

"The usual medical history is lacking in this case," he said. "Perhaps an account by Dr. B or his author friend, of the curious circumstances connected with the death of this man, may take its place."

"I can tell a good deal," said Stoner; "and I think it will bear directly on what you find when you open him up, even though it is not technical medical stuff. Do you care to hear it?"

"Tell it! Go on! Let's have it!"

"I have lived above him in the hotel for several months," Stoner began. "He struck me as a curious person, and as I do some writing, all mankind is my legitimate field for study. I tried to find out all I could about him.

"He has an office in the Little Building, and did a rather curious business. He dealt in vases and statuary, book-ends and chimneys, and things you put around in rooms to make them look artistic. He had men out hurrying the stuff, and others selling it, all by personal contact and on a very exclusive

basin. He kept the stock in a warehouse near the Rock Island tracks where they pass the Ball Park; I do not believe that he ever saw any of it. He just sat in the office and signed papers, and the other fellows made the money; and apparently they made a lot of it, for he has swung some big financial deals in this town.

"I often met him in the lobby or the elevator. He was a big, vigorous man and walked with an unusually graceful step and an appearance of strength and vitality. His eyes seemed to light up with recognition when he saw me, but in my company he was always formal and reserved. For such a vigorous looking man, his voice was singularly cracked and feeble, and his head gave an impression of being rather small for him, and his face old and wrinkled.

"He seemed fairly well known about the city. At the Eastbridge Club they told me that he plays golf occasionally and excellently, and is a graceful dancer, though somehow not a popular partner. He was seen frequently at the Y. M. C. A. bowling alleys, and played with an uncanny skill. Men loved to see him bowl for his cleverness with the balls, but wished he were not so formally courteous, and did not wear such an expression of complete happiness over his victories. Bridley, manager of Rudge & Gorman's book department, was the oldest friend of his that I could find, and he gave me some interesting information. They went to school together, and Anstruther was poor in health as well as in finance. Twenty-five years ago, during the hungry and miserable years after his graduation from the University, Bridley remembered him as saying:

"My brain needs a body to work with. If I had physical strength, I could do anything. If I find a fellow who can give it to me, I'll make him rich!"

"Bridley also remembers that he was sensitive because girls did not like his debilitated physique. He seems to have found health later, though I can find no one who remembers how or when. About ten years ago he came back from Europe where he had been for several years, in Paris, Bridley thinks; and for several years after this, a Frenchman lived with him. The city directory of that time has him living in the big stone house at 12th and "G" streets. I went up there to look around, and found it a double house, Dr. Faribourg having occupied the other half. The present caretaker has been there ever since Anstruther lived in the house, and she says that his French companion must have been some sort of an engineer, and that the two must have been working on an invention, from the sounds she heard and the materials they had about. Some three or four years ago the Frenchman and the machinery vanished, and Anstruther moved to the Cornhusker Hotel. Also at about this time, Dr. Faribourg retired from the practice of medicine. He must have been about 50 years old, and too healthy and vigorous to be retiring on account of old age or ill health.

"Apparently Anstruther never married. His private life was quite obscure, but he appeared much in public. He was always very courteously and polite to the ladies. Outside his business he took a great interest in Y. M. C. A. and Boy Scout camps, in the

National Guard, and in fact in everything that stood for an outdoor, physical life, and promoted health. In spite of his oddity he was quite a hero with the small boys, especially since the time of his radium hold-up. This is intimately connected with the story of his radium speculation that caused such a sensation in financial circles a couple of years ago.

"About that time, the announcement appeared of the discovery of new uses for radium; a way had been found to accelerate its splitting and to derive power from it. Its price went up, and it promised to become a scarce article on the market. Anstruther had never been known to speculate, nor to tamper with sensational things like oil and helium; but on this occasion he seemed to go into a peak. He cashed in on a lot of securities and caused a small panic in the city, as he was quite wealthy and had especially large amounts of money in the building-loan business. The newspapers told of how he had bought a hundred thousand dollars worth of radium, which was to be delivered right here in Lincoln—a curious method of speculating, the editors volunteered.

"It arrived by express one day, and Anstruther rode the express wagon with the driver to the station. I found the driver and he told the story of the hold-up at 8th and T<sup>h</sup> streets at eleven o'clock at night. A Ford car drove up beside them, from which a man pointed a pistol at them and ordered them to stop. The driver stopped.

"'Come across with the radium!' shouted the big black bulk in the Ford, climbing upon the express wagon. Anstruther's fat shot out like a flash of lightning and struck the arm holding the pistol; and the driver stated that he heard the pistol crash through the window on the second floor of the Lincoln Hotel. Anstruther pushed the express driver, who was in his way, backwards over the seat among the packages and leaped upon the hold-up man; the driver said he heard Anstruther's muscles crunch awfully, as with little apparent effort he flung the man over the Ford; he fell with a thud on the asphalt and stayed there. Anstruther then launched a kick at the man at the wheel of the Ford, who crumpled up and fell out of the opposite side of the car.

"The police found the pistol inside a room on the second floor of the Lincoln Hotel. The steering post of the Ford car was torn from its fastenings. Both of the hold-up men had ribs and collar-bones broken, and the gunman's forearm was bent double in the middle with both bones broken. These two men agreed later with the express driver that Anstruther's attack, for suddenness, swiftness, and terrific strength was beyond anything they had dreamed possible; he was like a thunderbolt; like some furious demon. When the two men were huddled in black heaps on the pavement, Anstruther said to the driver, quite impersonally:

"Drive to the police station; Come on! Wake up! I've got to get this stuff looked up!"

"One of the hold-up men had lost all his money and the home he was building when Anstruther had foreclosed a loan in his desperate scramble for radium. He was a Greek named Poulos, and has

(Continued on page 979)



# The SECOND DELUGE

~ By Garrett P. Serviss ~

Author of "The Moon Motel," "A Columbus of Space," etc.



On the broad breast of the Sphinx, he saw a representation of a man overwhelmed with a deluge, and concluding it was what he instantly concluded to be the picture of a wretched "Underworld," he asked Egyptian hieroglyphics, with which Casano was familiar, was an inscription in letters of gold—the prophecy of the Second Deluge!

COSMO VERSAL has made the discovery that the world is on the eve of a second Deluge. He placards New York with posters, calling all to prepare for the coming flood. For his own safety he begins the building of an enormous ark and barely has it completed when reports are flashed about the world that the waters are actually beginning to rise.

Suddenly, in midday, the world grew dark and people became terror-stricken. The rains descended from an invisible source and the waters rose. Literally, the world went. About his ark Cosmo had placed electric wires, and when the maddened populace, now terrified beyond measure, attempted to storm the ark, hundreds were checked and many instantly killed. Then the waters rose ten feet an hour.

Finally the City of New York is all submerged and the huge Municipal Building, its nearly all under water when the last of the government battle-ships

breaks away from the Brooklyn Navy-Yard and is carried over against the Municipal Building, smashing through the side and then sinking to the bottom. From this wreck a small boat arises and in this boat comes Amos Blank, the richest man in the world, alongside the ark. Blank has lost his mind, but he offers a billion dollars in securities, and waves the pocket over his head, if Cosmo will take him aboard. He is taken to and then the Ark is started toward the East where, it has been figured, is the world's highest land, and which will be the first landing place when the waters recede. Suddenly these aboard see the stars overhead and know it has stopped raining.

Meanwhile Professor Pladder has been conveying the President with a party in an aeroplane while the water is falling, and when the rain stops this wonderful flying-machine rests on a mountain peak. It can be converted into a serviceable boat, and this is done.

## THE SECOND DELUGE

By GARRETT P. SERVISS

(Part III)

### CHAPTER XVI

#### Mutiny in the Ark!

WE left Cosmo Versal and his Ark full of the flower of mankind in the midst of what was formerly the Atlantic Ocean, but which had now expanded over so many millions of square miles which had once been the seats of vast empires, that to an eye looking at it with a telescope from Mars it would have been unrecognizable.

All of eastern North America, all of South America to the east of the Andes, all but the highest mountains of Europe, nearly all of Africa, except some of the highlands of the south, all of northern and southwestern Asia, as well as the peninsula of India, all of China and the adjacent lands and islands except the lofty peaks, the whole of Australia, and the archipelagoes of the Pacific, had become parts of the floor of a mighty ocean which rolled unbroken from pole to pole.

The Great Deep had resumed its ancient reign, and what was left of the habitable globe presented to view only far separated islands and the serrated tops of such ranges as the Alps, the Caucasus, the Himalayas, and the Andes. The astonished inhabitants of the ocean depths now swam over the ruins of great cities, and brushed with their fins the obelisk capitals of columns that had supported the proud structures of human hands.

We have seen how the unexpected arrest of the flood had left Cosmo uncertain as to the course that he ought to pursue. But he did not long remain in doubt. He was sure that the downpour would be resumed after an interval which at the most could not exceed a few weeks, and he resolved to continue his way toward the future land of promise in Asia.

But he thought that he would have time to turn his prow in the direction of Europe, for he felt a great desire to know by actual inspection to what height the water had attained. He was certain that it could not be less than he had estimated—the indications of his rain-gauge had been too unvarying to admit of doubt on that point—but he had no means of direct measurement since he could not sound the tremendous depths beneath the Ark.

After long meditation on the probable effects of the descending columns of water which he had seen, he concluded that they might have added more rapidly than he first supposed to the increase of the general level. Besides, he reflected that there was no proof that the general downpour might not have been greater over some parts of the earth than others. All these doubts could be dispelled if he could get a good look at some lofty mountain range, such as the Sierra Nevada of Spain, or the Pyrenees, or, if he could venture within sight of them, the Alps.

So he said to Captain Arma: "Steer for the coast of Europe."



*PRACTICALLY the whole world is now covered by the great flood, as far as the searhores of the ark term.*

*The "Jules Verne," the intrepid French submarine, in the meanwhile is exploring the submerged world and is circling the city of Paris, and later, with Cosmo Versal as a passenger, Egypt is visited as well. Important discoveries are made, particularly at the Sphinx, and its long suspected secret is at last revealed.*

The fine weather had produced a good effect upon the spirits of the company. Not only were the ports and the gangways all open, but Cosmo ordered the temporary removal of rows of adjustable plates on the sides of the vessel, which transformed the broad outer gangways, running its whole length, into delightful promenade decks. There, in easy chairs, and protected with rugs, the passengers sat, framed by a refreshing breeze, and dazzled by the splendor of the ocean.

They recalled, by their appearance, a ship-load of summer tourists bound for the wonders and pleasures of foreign ports. This likeness to a pleasure cruise was heightened by the constant attentions of the crew, under Cosmo's orders, who carried about refreshing drinks and lunches, and conducted themselves like regular ocean "stewards."

It seemed impossible to believe that the world had been drowned, and some almost persuaded themselves that the whole thing was a dream.

It must not be supposed that the thousand-odd persons who composed this remarkable ship's company were so hard-hearted, so selfish, so forgetful, so racially obtuse, that they never thought of the real horror of their situation, and of the awful calamity that had overwhelmed so many millions of their fellow creatures. They thought of all that only too seriously and in spite of themselves. The women especially were overwhelmed by it. But they did not wish to dwell upon it, and Cosmo Verail did not wish that they should.

At night he had musicians play in the grand saloon; he distributed books among the passengers from a large library which he had selected; and at last he had the stage set, and invited his friends, the players, to entertain the company.

But he would have no plays but those of Shakespeare.

There were, probably, not half a dozen persons in the Ark who had even seen representations of these great dramas, and very few who had read them, so that they had the advantage of complete novelty.

The play selected for the first representation was the tragedy of "King Lear," a strange choice, it would, at first sight, seem, but Cosmo Verail had a deep knowledge of human nature. He knew that only tragedy would be endured there, and that it must be tragedy so profound and overmastering that it would dominate the feelings of those who heard and beheld it. It was the principle of immunizing therapeutics, where poison paralyzes poison.

It turned out as he anticipated. These people, unused to such depth of dramatic passion, for the plays to which they had been used had been far from the Shakespearian standard, were wholly absorbed in the development of the tragedy. It was a complete revelation to them, and they were carried out of themselves, and found in the sympathy awakened by this heart-crushing spectacle of the agony of human war an unconscious solace for their own moral anguish.

Afterward Cosmo put upon the stage "Hamlet," and "Othello," and "Macbeth," and "Coriolanus," and "Julius Caesar," but he avoided, for the present,

the less tragic dramas. And all of them, being new to the hearers, produced an enormous effect.

On alternate nights he substituted music for the drama, and, as this was confined to the most majestic productions of the great masters of the past, many of whose works, like some of Shakespeare's had long been neglected if not forgotten, their power over the spirits of the company was, perhaps, even more pronounced.

Cosmo Verail was already beginning the education of his chosen band of race regenerators, while he roused upon the wonders that the sciences of eugenics would achieve after the world should have re-emerged from the waters.

One of the most singular effects of the music was that produced upon the famous billionaire, Amos Blank. He had been confined in the room that Cosmo had assigned to him, and was soothed, whenever Cosmo could find time to visit him, with pretended acquaintances in his crazed notion that the trip of the Ark was part of a scheme to "corner" the resources of the world.

Cosmo persuaded him that the secret was unknown except to themselves, and that it was essential to success that he (Blank) should remain in retirement, and accordingly the latter expressed no desire to leave his place of imprisonment, which he regarded as the headquarters of the combination, passing hours in covering sheets of paper with columns of figures, which he fancied represented the future profits of the enterprise.

One night when a symphony of Beethoven was to be played, Cosmo led Amos Blank through the crowded saloon and placed him near the musicians. He resisted at first, and when he saw the crowd he drew back, exclaiming:

"What! Not overboard yet!"

But Cosmo soothed him with some whispered promises, and he took his seat, glancing covertly around him. Then the instruments struck up, and immediately fixed his attention. As the musical themes developed his eyes gradually lost their wild look, and a softened expression took its place. He sank lower in his seat, and rested his head upon his hand. His whole soul seemed, at last, to be absorbed in the music. When it was finished Blank was a changed man. Then Cosmo clearly explained to him all that had happened.

After the first overwhelming effect of his re-awakening to the realities of his situation had passed, the billionaire was fully restored to all his faculties. Henceforth he mingled with the other passengers and, as if the change that had come over his spirit had had greater results than the simple restoration of sanity, he became one of the most popular and useful members of Cosmo Verail's family of pilgrims.

Among the other intellectual diversions which Cosmo provided was something quite unique, due to his own mental bias. This consisted of "conferences," held in the grand saloon, afternoons, in the presence of the entire company, at which the principal speakers were his two "speculative geniuses," Costaké Thorlode and Sir Wilfrid Athelstone. They did not care very much for one an-

other and each thought that the time allotted to the other was wasted.

Theride wished to talk continuously of the infinite energy stored up in the atoms of matter, and of the illimitable power which the release of that energy, by the system that he had all but completed, would place at the disposition of man; and at the same time Sir Athelstone could with difficulty be held in check while he impatiently awaited an opportunity to explain how excessively near he had arrived to the direct production of protoplasm from inanimate matter, and the chemical control of living cells, so that henceforth man could people or unpeople the earth as he liked.

One evening, when everybody not on duty was in bed, Captain Ames entered Cosmo's cabin, where the latter was dictating to Joseph Smith, and slyly approaching his chief, with a furtive glance round the room, stooped and whispered something in his ear. A startled, though incredulous, expression appeared on Cosmo's face, and he sprang to his feet, but before speaking he obeyed a sign from the captain and told Smith to leave the room. Then he locked the door and returned to his table, where he dropped into a chair, exclaiming in a guarded voice:

"Great Heaven, can this be possible! Have you not made a mistake?"

"No," returned the captain in a strident whisper, "I have made no mistake. I'm absolutely sure. If something is not done instantly we are lost!"

"This is terrible!" returned Cosmo, taking his head in his hands. "You say it is that fellow Campo? I never liked his looks."

"He is the ringleader," replied the captain. "The first suspicion of what he was up to came to me through an old seafarer who has been with me on many a voyage. He overheard Campo talking with another man and he listened. Trust an old seafarer to use his ears and keep himself out of notice."

"And what did they say?"

"Enough to freeze the marrow in your bones! Campo proposed to begin by throwing 'old Verrell' and me into the sea, and then he said, with us gone, and nobody but a lot of middle-headed scientists to deal with, it would be easy to take the ship; seize all the treasure in her; make everybody who would not join the mutiny walk the plank, except the women, and clear for some place where they could land and lead a jolly life."

"You see," says Campo, "this flood is a fake. There ain't going to be no more flood; it's only a shore wash. But there's been enough of it to fix things all right for us. We've got the world in our fist! There's millions of money aboard this ship, and there's plenty of female beauty, and we've only got to reach out and take it!"

Cosmo Verrell's brow darkened as he listened, and a look that would have cowed the mutineers if they could have seen it, came into his eyes. His hand nervously clutched a paper-knife which broke in his grasp, as he said in a voice trembling with passion:

"They don't know me—you don't know me. Show me the proofs of this conspiracy. Who are the others? Campo and his friend can't be alone."

"Alone!" exclaimed the captain, unconsciously

raising his voice. "There's a dozen as black-handed rascals in it as ever went swarming."

"Do you know them?"

"Jim Waters does."

"Why haven't you told me sooner? How long has it been going on?"

"Almost ever since the deluge stopped, I think; but it was only last night that Waters got on the track of it, and only now that he told me. This fellow that Waters heard Campo talking to is plainly a new recruit. I say there are a dozen, because Waters has found out that number; but I don't know but that there may be a hundred."

"How did these wretches get aboard?" demanded Cosmo, fiercely opening and shutting his fists.

"Excuse me," said the captain, "but that is up to you to say."

"So it is," replied Cosmo, with a grim look; "and it's 'up to me' to say what'll become of them. I see how it is, they must have got in with the last lot that I took—under assumed names very likely. I've been more than once on the point of calling that man Campo up and questioning him, I was surprised by his hangdog look the first time I saw him. But I have been so busy."

"You'll have to get busy in another sense if you mean to save this ship and your life," said the captain earnestly.

"So I shall. Are you armed? No! Then take these—and use 'em when I give the word."

He handed the captain two heavy automatic pistols, and put a pair in his own sidepockets.

"Now," he continued, "the first thing is to make sure that we've got the right men—and all of them. Call in Joseph Smith."

The captain went to the door, and as he approached it there was a knock. He turned the key and cautiously opened a crack to look out. The door was instantly jerked open in his face. Six men rushed in, with Campo, a burly, black-browed fellow, at their head. Three of the men threw the captain on his back, and pinioned his hands, before he could draw a weapon, while Campo and the others sprang toward Cosmo Verrell, Campo pointing a pistol at his head.

"It's all up, Mr. Verrell!" cried Campo with a sneer. "I'll take command of this ship, and you'll go fish for sea-balls."

Cosmo had one advantage; he was behind his desk, and it was a broad and long one, and placed almost against the wall. They could not get at him without getting round the desk. Campo did not fire, though he might have shot Cosmo in his tracks; but evidently he was nourishing the idea of making him walk the plank. With a sign he commanded his co-conspirators to flank the desk at each end, while he kept Cosmo covered with his pistol.

But with a lightning movement, Cosmo dropped under the desk, and, favored by his slight form and his extreme agility, darted like a cat past Campo's legs, and, almost before the latter could turn round, was out of the open door. Campo fired at the retreating form, but the bullet went wide of the mark. The pistol was practically noiseless, and the sound reached no ears in the staterooms.

It happened that a switch controlling the lights

in the gangway was on the wall by Cosmo's door, and in passing he swiftly reached up and turned it off. Thus he was in complete darkness, and when Campo darted out of the door he could not see the fugitive. He could hear his footsteps, however, and with two of his companions he rushed blindly after him, firing two or three shots at random. But Cosmo had turned at the first cross passage, and then at the next, this part of the Ark being a labyrinth of corridors, and the pursuers quickly lost all trace of him.

Campo and his companions made their way back to Cosmo's cabin, where their fellows were guarding Captain Arms. They found the switch in the passage and turned on the light. They were almost immediately joined by several other conspirators conducting Joseph Smith, bound and gagged. They held a short consultation, and Campo, with many curses, declared that Cosmo Versall must be caught at all hazards.

"The big-headed dand!" he cried, gnashing his teeth. "Let me get my grippers on him, and I'll squelch him like a bug!"

They threw Joseph Smith into the room beside the helpless captain, after taking the latter's pistols, looked the door from the outside, and hurried off on their search. In the passages they encountered several more of their friends. They now numbered fifteen, all armed. This may seem a small number to undertake to capture the Ark; but it must be remembered that among the thousand-odd inmates, exclusive of the crew, only about one in three was a man, and the majority of these were peaceable scientists who, it was to be presumed, had no fight in them.

At any rate, Campo, with the reckless courage of his kind, felt confident that if he could get Cosmo Versall, with the captain and Joseph Smith out of the way, he could easily overmaster the others. He had not much fear of the crew, for he knew that they were not armed, and he had succeeded in winning over three of their number, the only ones he had thought at all dangerous, because he had read their character. More than half the crew were employed about the engines or on the animal deck, and most of the others were simply stewards who would not stand before the pistols.

But, while the mutineers were hurriedly searching the corridors, Cosmo had run straight to the bridge, where he found two of his men in charge, and whence he sent an electric call to all the men employed in the navigation of the vessel. They came running from various directions, but a dozen of them were caught in the passages by the mutineers and bound before they could comprehend what had happened. Seven, however, succeeded in reaching the bridge, and among these was Jim Waters.

"There's a mutiny," said Cosmo. "We've got to fight for our lives. Have you got arms?"

Not one had a weapon except Waters, who displayed a pistol half as long as his arm.

"Here, Peterson, take this," said Cosmo, handing a pistol to one of the two mariners who had been on the bridge. "They will be here in a minute. If

Campo had been a soldier, he'd have had possession here the first thing. I'll turn off all lights."

With that he pressed a button which put out every lamp in the Ark. But there was a full moon, and they concealed themselves in the shadows.

Promptly they heard the mutineers approaching, stumbling and cursing in the darkness. Cosmo directed Peterson and Waters to place themselves at his side, and told them to fire when he gave the word.

The next instant four men appeared crossing a moonlit place at the foot of the steps on the outside of the dome.

"Wait," whispered Cosmo. "The pistols go at a pull. We can sweep down a dozen in ten seconds. Let them all get in sight first."

Half a minute later there were twelve men climbing the steps and cautiously looking up.

"Fire!" cried Cosmo, setting the example, and three streams of flame poured from the bridge. The sound of the bullets striking made more noise than the explosions.

Five or six of the men below fell, knocking down their comrades, and a loud curse burst from the lips of Campo, who had a bullet through his arm.

The mutineers tumbled in a heap at the bottom, and instantly Cosmo, switching on all lights, led the way down upon them. His men, who had no arms, seized anything they could get their hands on that would serve to strike a blow, and followed him.

The conspirators were overwhelmed by the suddenness and fury of the attack.

Four of them were killed outright and five were wounded, one so severely that he survived only a few hours.

Cosmo's quick and overwhelming victory was due to the fact that the mutineers, in mounting the steps, could not see him and his men in the shadows, and when the automatic weapons, which fired three shots per second by repeated pressure of the trigger, from a chamber containing twenty-one cartridges, once opened on them they could do nothing in the hall of missiles, especially when crowded together on the steps.

Campo was the only one who had any fight left in him. He struck Cosmo a blow on the head that felled him, and then darted out upon the forepart of the dome, running on the clats, and made his way to the top.

Cosmo was on his feet in a second and rushing in pursuit, closely followed by Jim Waters. The fugitive ran for the entrance leading to the lookout on the central mast. He climbed them like a squirrel, and the man in the crow's nest, amazed at the sight below him, stared at the approaching mutineer, unable to utter a cry. Campo, who, as the moonbeams shewed, now had a knife in his teeth, rapidly approached, and the lookout shrank in terror. But before Campo could reach the crow's nest, a blinding light blinded his eyes. Cosmo had shouted an order to Peterson to run back to the bridge and turn a search-light upon the mast. Then Campo heard a thundering voice below him:

"Take another step and I'll blow you into the sea!"

He glanced below, and saw Cosmo and Waters covering him with their pistols.

"Not another step!" roared Cosmo again. "Come down, and I'll give you a trial for your life."

Campo hesitated; but, seeing that he could be shot down, and finding a gleam of hope in Cosmo's words, he turned and came slowly down. The moment he touched the bottom he was seized by Waters and another man, and, under Cosmo's directions, his hands were bound behind his back.

Ten minutes later the members of the crew who had been caught by the mutineers in the passageways were all unbound, and then Cosmo broke open the door of his cabin, the key having been hot or thrown away by Campo, and the captain and Joseph Smith were released.

"Well, we've got 'em," said Cosmo grimly to the captain. "The mutiny is at an end, and there'll never be another."

In the meantime many of the passengers had been aroused by the unaccustomed noise, although the pistols had not made enough sound to be heard from the place where they were fired. Night-dressed heads appeared on all sides, and some, in scanty clothing, were wandering in the passageways, demanding what the trouble was. Cosmo, the captain, and Joseph Smith reassured them, saying that there was no danger, and that something had happened which would be explained in the morning.

The prisoners—and the whole fifteen were finally captured—were locked up in a strong-room, and a surgeon was sent to dress their wounds. Cosmo Verrell and the captain resumed their accustomed places on the bridge, where they talked over the affair, and Cosmo explained his plans for the morrow.

"I'll give him his trial, as I promised," Cosmo said in conclusion, "and you'll see what it will be. *Mutiny aboard this Ark!*" And he struck the rail a violent blow with his fist.

The next morning directly after breakfast Cosmo called all passengers and crew into the grand saloon, where many wondering looks were exchanged and many puzzling questions asked. When the mutineers, with hands tied behind their backs, and their many bandages on arms and legs, were led in, exclamations of astonishment were heard, and some of the timid ones shrunk away in fear.

Cosmo lost no time with preliminaries.

"These men," he said, taking his stand upon the platform, "have mutinied and tried to capture the Ark. This fellow"—pointing to Campo—"was the conspirator and leader of the plot. He intended to throw me and Captain Arns, and all of you whom he did not wish to retain for his selfish purposes, into the sea. But Heaven has delivered them into our hands. I have promised them a trial, and they shall have it. But it will be a trial in which justice shall not be cheated. I find that a moral poison has stolen into this selected company, and I will eliminate it for once and all."

The expressions of amazement and alarm redoubled in intensity.

"Professor Abel Able, Professor Jeremiah Meese, Sir Wilfred Athekere, Costaké Theriade," Cosmo continued, "you will please come forward to act

as members of the jury, of which I name myself also a member. I shall be both judge and juror here, but I will hear what the rest of you may have to say."

The men named stepped forward with some evidences of embarrassment, and Cosmo gravely gave them seats beside him. Then he commanded that the prisoners should confront the jury, and heavily guarded, they were led to the front.

The brutishness of Campo's face had never struck the passengers who had seen him before as it did now. He looked a veritable jailbird. At the same time he was evidently in terror for his life. He muttered something which nobody understood.

Cosmo, who had informed himself of all the circumstances from Waters, and by privately questioning the others, had satisfied himself that the entire scheme of the mutiny was of Campo's contrivance, and that they had been led into it solely by his persuasion and threats, ordered Waters to speak. The seaman told a straight story of what he had heard and seen. Cosmo himself then related the events of the night. When he had finished he turned to Campo and demanded what he had to say.

Campo again muttered under his breath, but made no attempt to defend himself, simply saying:

"You promised me a trial."

"And haven't I given you a trial?" demanded Cosmo with flashing eyes. "You thought you held the world in your grasp. It is I that hold it in my grasp and you, fool! You were going to make us 'walk that plank.' It is you who are going to walk it! Is that the verdict?" (turning to the four jurymen.)

Some of them nodded, some simply stared at Cosmo, surprised by the vehemence of his manner.

"Enough," he said, "As to you," addressing the other prisoners, "you have had your lesson; see that you don't forget it! Release them, and lead Campo to the promenade deck."

Nobody thought that Cosmo would literally execute his threat to make the mutineer walk the plank, but, as he had told Captain Arns, they didn't know him. They were about to see that in Cosmo Verrell they had not only a prophet, a leader, and a judge, but an inexorable master also.

A plank was prepared and placed sloping from the rail.

"Walk!" said Cosmo firmly.

To everybody's surprise Campo, with blinded eyes, started immediately up the plank, followed its full length with quick, unflinching step, and plunging from the end, disappeared in the sea.

Many had turned away, unable to look, but many also saw the tragedy to the end. When a profound sigh was heard from the whole company of the spectators. As they turned away, talking in awed voices, they felt, as never before, that the world had shrunk to the dimensions of the Ark, and that Cosmo Verrell was its dictator.

That same afternoon Cosmo arranged one of his "conferences," and nobody dared to be absent, although all minds were yet too much excited to follow the discussions which few could understand. But at length Costaké Theriade concentrated their attention by a wild burst of eloquence about the

wonders of the inter-atomic forces. Sir Athelstone, unable to endure the applause that greeted his rival, abruptly springing to his feet, his round face red with anger, and shouted:

"I say, you know, this is twaddle!"

"Will the Englishman interrupt not?" cried Thorlath, with his eyes ablaze. "Shall I project not the Sir Englishman to the fishes?"

He looked as if he were about to try to execute his threat, and Sir Athelstone assumed a haughty attitude; but before hostilities could begin a loud shout from the deck, followed by cries and exclamations, caused everybody to rush out of the saloon.

Those who succeeded in getting a glimpse over the shoulders of the members of the crew, who were already lined up along the only portion of the bulwarks available for seeing the part of the ocean on which attention seemed to be fixed, stared open-mouthed at a round-backed mass of shining metal, with a circular aperture on the top, the cover of which was carried to one side, and there stood a man, wearing a gold-headed red topi, and bowing and smiling with great civility.

## CHAPTER XVII.

### The Jules Verne

THE swell of the sea caused the strange looking craft to rise and sink a little, and sometimes the water ran bubbling all around the low rim of the aperture, in the center of which the red-capped man stood, resting on some invisible support, repeating his salutations and amicable smiles, and balancing his body to the rocking of the waves with the unconscious skill of a sailor.

The Ark was running slowly, but it would very soon have left the stranger in its wake if he had not also been in motion. It was evident that the object under his feet must be a submersible vessel of some kind, although it was of a type which Captain Arma, standing beside Cosmo on the bridge, declared that he had never set eyes on before. It lay so low in the water that nothing could be seen of its motive machinery, but it kept its place alongside the Ark with the ease of a dolphin, and gradually edged in closer.

When it was so near that he could be heard speaking in a voice hardly raised above the ordinary pitch, the man, first again lifting his cap with an elegant gesture, addressed Cosmo Verrell by name, using the English language with a scarcely perceptible accent:

"M. Verrell, I offer you my felicitations upon the magnificent appearance of your Ark, and I present my compliments to the ladies and gentlemen of your company."

And then he bowed once more to the passengers, who were almost crowding each other over the side in their eagerness to both see and hear.

"Thank you," responded Cosmo, "but who are you?"

"Capitaine Yves de Beauchamps, of the French army."

"Where's the navy, then?" blurted out Captain Arma.

De Beauchamps glanced at the speaker a little disdainfully, and then replied gravely:

"Alas! At the bottom of the sea—with all the other navies."

"And how have you escaped?" demanded Cosmo Verrell.

"As you see, in a submersible."

"Can it be possible?" exclaimed Cosmo. "And you have been in the sea ever since the beginning of the flood?"

"Since the first rise of the ocean on the coast of Brest."

"Have you no companions?"

"Six—in truth seven."

"Astounding!" said Cosmo Verrell. "But I heard nothing of the preparation of a submersible. In fact, the idea of such a thing never occurred to me. You must have made your preparations secretly."

"We did. We did not share your certainty, M. Verrell, concerning the arrival of a deluge. Even when we embarked we were not sure that it would be more than an affair of the coasts."

"But you must be on the point of starvation by this time. The flood has only begun. This cessation is but for a time, while we are passing a gap in the mists. You will come aboard the Ark. I had chosen my company, but your gallant escape, and the ability that you have shown, prove that you are worthy to aid in the reestablishment of the race, and I have no doubt that your companions are equally worthy."

The Frenchman bowed politely, and with a slight smile replied:

"I believe, M. Verrell, that the Jules Verne is as safe and comfortable, and proportionately as well provisioned, as your Ark."

"So you call it the Jules Verne?" returned Cosmo, smiling in his turn.

"We were proud to give it that name, and its conduct has proved that it is worthy of it."

"But you will surely come aboard and shake hands, and let us offer you a little hospitality," said Cosmo.

"I should be extremely happy to pay my compliments to the ladies," responded de Beauchamps, "but I must postpone that pleasure for the present. In the meantime, however, I should be glad if you would lower a landing stage, and permit me to send aboard the seventh member of our party, who, I venture to think, may find the Ark a more comfortable abode than our submersible."

"And who may that person be?"

"The King of England."

"Yes," resumed the Frenchman, "we picked up His Majesty the first day after the deluge began to descend from the sky."

Exclamations of surprise and wonder were heard on all sides.

"I will lower a ladder at once," Cosmo called out, and immediately ran down to the lowest deck, commanding his men to make haste.

The Jules Verne was skillfully brought close up to the side of the Ark, so that the visible part of her rounded back was nearly in contact with the bottom of the companion-ladder when it was lowered. The sea was so calm that there was little difficulty in executing this maneuver. De Beauchamps disap-

peered in the depths of the submersible, and after a few minutes reemerged into sight, supporting on his arm a stout, rather short man, whose face, it was evident, had once been full and ruddy, but now it was pale and worn.

"It is he!" exclaimed an English member of Cosmo's company in some of his fellow countrymen who had forced their way to the front.

"Is it the king?"

And then occurred a singular thing, inspired by the marvellous circumstances of this meeting of the sovereign of a drowned kingdom, upon the bosom of the waters that had destroyed it, with the mere handful that remained alive out of all the millions of his subjects.

These loyal English people bared their heads (and there were three women among them) and sang, with a pathos that surely the old hymn had never expressed before, their national anthem: "God Save the King."

The effect was immense. Every head aboard the Ark was immediately uncovered. De Beauchamps removed his cap, and one or two bared heads could be seen peering out of the interior of the submersible below him. As the king was steadied across to the bottom of the companion-ladder, the voices of the singers rose louder, and many of the other passengers, moved by sympathy, or carried away by epidemic feeling, joined in the singing. Never had any monarch a greeting like that! His recipient was moved to the depths of his soul, and but for the aid given him would have been unable to ascend the swaying steps.

As he was assisted upon the deck, the song ceased and a great cheer broke forth. There were tears in his eyes, and he trembled in every limb, when he returned the welcoming pressure of Cosmo Verail's hand.

The moment he saw that the king was safely aboard the Ark, de Beauchamps, with a farewell salutation, disappeared into the interior of the *Sales Ferus*, and the submersible sunk out of sight as gently as if it had been a huge fish that had come to the top of the sea to take a look about.

After the sensation caused by the arrival of the English monarch aboard the Ark had somewhat quieted down, and after His Majesty had had an opportunity to recover himself, Cosmo Verail invited his new guest to tell the story of his escape. They were seated in Cosmo's cabin, and there were present Joseph Smith, Professor Jeremiah Moses, Professor Abel Able, and Amos Blank, besides several other members of the ship's company, including two of the loyal Englishmen who had been the first to strike up the national anthem on seeing their rescued king.

Richard Edward, or Richard IV as he was officially entitled, was one of the best kings England ever had. He was popular not only because of his almost democratic manners and the simplicity of his life, but more because he was a great lover of peace. We have already seen how he was chosen, solely on that account, to be of the number of the rulers invited to go in the Ark. He had not even replied to Cosmo's invitation, but that was simply because, like everybody about him in whom he placed con-

fidence, he regarded Cosmo Verail as a mere mountebank, and thought that there was no more danger of a universal flood than of the fall of the moon out of the sky.

Before responding to Cosmo's request he made a gracious reference to the indifference with which he had formerly treated his present host.

"I am sorry, Mr. Verail," he said, with a deprecatory smile, "that I did not sooner recognize the fact that your knowledge surpassed that of my scientific advisors."

"Your Majesty was not alone," replied Cosmo gravely, turning with his fingers a small globe that stood on his desk. "From all these deep-sea-men continents," (waving his hand toward the globe), "if the voices once heard there could now speak, there would arise a mighty sound of lament for that error."

The king looked at him with an expression of surprise. He glanced from Cosmo's diminutive figure to his great overhanging brow, marked with the lines of thought, and a look of instinctive deference came into his eyes.

"But," continued Cosmo Verail, "it is bootless to speak of these things now. I beg that Your Majesty will condescend to enlighten us concerning the fate of that great kingdom, of ancient renown, over which you so worthily reigned."

An expression of deepest pain passed across the face of Richard Edward. For some moments he remained buried in a mournful silence, and many sighs came from his breast. All looked at him with profound commiseration. At last he raised his head and said, sorrowfully and brokenly:

"My kingdom is drowned—my subjects have perished, almost to the last soul—my family, my gracious consort, my children—all, all—gone!"

Here he broke down, and could speak no more. Not a word was spoken, for a time, and the two Englishmen present wept with their unfortunate king.

Cosmo Verail was no less deeply moved than the others. He sat, for a while, in complete silence. Then he arose and, going to the king, put his hand upon his shoulder, and talked to him long, in a low, consoling voice. At last the broken-spirited monarch was able to suppress his emotions sufficiently to recite, but with many interruptions while he regained mastery of his feelings, the story of his woes and of his marvellous escape.

"Sir Francis Brook," he said, "prepared a barge, when the water invaded London, and in that barge we escaped—Her Royal Majesty, our children, and a number of members of the Royal household—the barge was the only vessel of levity that existed in England. Sir Francis had furnished and provisioned it well, and we did not think that it would be necessary to go farther than to some high point in the interior. Sir Francis was of the opinion that Wales would afford a secure refuge.

"It was a terrible thing to see the drowning of London, the sweeping of the awful bore that came up the Thames from the sea, the shipping wrecked by the tearing waves, the swirl of the fast-rising water round the immense basin in which the city lay, the downfall of the great buildings—Westmin-



ster Abbey was one of the first that succumbed—the overturned boats, and even great vessels floating on their sides, or bottom up, the awful spectacle of the bodies of the drowned tossing in the waves—all these sights were before our horrified eyes while the vast eddy swept us round and round until the water rose so high that we were driven off toward the southwest.

"That we should have escaped at all was a miracle of miracles. It was the wonderful buoyancy of the leviathan barge that saved us. But the terrors of that scene can never fade from my memory. And the fearful sufferings of the queen! And our children—but I cannot go on with this!"

"Calm yourself, Your Majesty," said Cosmo sympathetically. "The whole world has suffered with you. If we are spared and are yet alive, it is through the hand of Providence—to whom we must bow."

"We must have passed over Surrey and Hampshire," the king resumed, "the invasion of the sea having buried the hills."

"I am surprised at that," said Cosmo. "I did not think that the sea had anywhere attained so great an elevation before the deluge descended. At New Fock the complete drowning of the city did not occur until the downpour from the sky began."

"Oh! that deluge from the heavens!" cried the king. "What we had suffered before seemed but little in comparison. It came upon us after night; and the absolute darkness, the awful roaring, the terrific force of the falling water, the sense of suffocation, the rapid filling of the barge until the water was about our necks—these things drove us wild with despair."

"I tried to sustain my poor queen in my arms, but she struggled to seize the children and held them above the water, and in her efforts she escaped from my hands, and therefore I could find her no more. I stumbled about, but it was impossible to see; it was impossible to be heard. At last I fell unconscious face downward, so it afterward appeared, upon a kind of bench at the rear end of the barge, which was covered with a narrow metallic roofing, and raised above the level of the bulwarks. It was there that I had tried to shelter the queen and the children."

"In some way I must have become lodged there, under the awning, in such a position that the pitching of the barge failed to throw me off. I never regained consciousness until I heard a voice shouting in my ear, and felt some one pulling me, and when I had recovered my senses, I found myself in the submersible."

"And all your companions were gone?" asked Cosmo, in a voice shaking with pity.

"Yes, oh Lord! All! They have been swept overboard by the waves—and would that I had gone with them!"

The poor king broke down again and sobbed. After a long pause Cosmo asked gently:

"Did the Frenchman tell you how he came upon the barge?"

"He said that in rising to the surface to find out the state of things there the submersible came up directly under the barge, cutting it in such a way,

that I was rolled out and he caught me as I was swept close to the opening."

"But how was it that the downpour, entering the submersible, when the cover was removed, did not fill it with water?"

"He had the cover so arranged that it served as an almost complete protection from the rain. Some water did enter, but not much."

"A wonderful man, that Frenchman," said Cosmo. "He would be an acquisition for me. What did he say his name was? Oh, yes, *de Beauchamps*—I'll make a note of that. I shouldn't wonder if we heard of him again."

Cosmo Verail was destined to encounter Ives de Beauchamps and his wonderful submersible *Jules Verne* sooner, and under more dramatic circumstances than he probably anticipated.

## CHAPTER XVIII.

### Navigating Over Drowned Europe

**A**FTER the English king had so strangely become a member of its company the Ark resumed its course in the direction of what had once been Europe. The spot where the meeting with the *Jules Verne* had occurred was west of Cape Finisterre, and, according to the calculations of Captain Arma, in longitude fifteen degrees, four minutes west, latitude forty-four degrees, nine minutes north.

Cosmo decided to run into the Bay of Biscay, skirting its southern coast in order to get a view of the Cantabrian Mountains, many of whose peaks, he thought, ought still to lie well above the level of the water.

"There are the Peaks of Europe," said Captain Arma, "which lie less than twenty miles directly back from the coast. The highest point is eight thousand six hundred and seventy feet above sea level, or what used to be sea level. We could get near enough to it, without any danger, to see how high the water goes."

"Do you know the locality?" demanded Cosmo.

"As well as I know a compass-card!" exclaimed the captain. "I've seen the Europa peaks a hundred times. I was wrecked once on that coast, and being of an inquiring disposition, I took the opportunity to go up into the range and see the old mines—and a curious sight it was, too. But the most curious sight of all was the shepherdesses of Trarreda, dressed just like the men, in homespun breeches that never were out. You'd meet 'em any where on the slopes of the Pico del Ferro, cruising about with their flocks. And the cheese that they made! There never was any such cheese!"

"Well, if you know the place so well," said Cosmo, "steer for it as fast as you can. I'm curious to find out just how high this flood has gone, up to the present moment."

"Maybe we can rescue a shepherdess," returned the captain, chuckling. "She'd be an ornament to your new Garden of Eden."

They kept on until, as they approached longitude five degrees west, they began to get glimpses of the mountains of northern Spain. The coast was all under deep water, and also the foot-hills and lower

ranges, but some of the peaks could be made out far inland. At length, by cautious navigation, Captain Arma got the vessel quite close to the old shore line of the Asturias, and then he recognized the Europa peaks.

"There they are," he cried. "I'll know 'em if they'd emigrated to the middle of Africa. There's the old Terra de Cerredo and the Peña Santa.

"How high did you say the main peak is?" asked Cosmo.

"She's eight thousand six hundred and seventy feet."

"From your knowledge of the coast do you think it safe to run in closer?"

"Yes, if you're sure the water is not less than two thousand four hundred feet above the old level we can get near enough to see the water-line on the peaks, from the *cro-neast*, which is two hundred feet high."

"Go ahead, then."

They got closer than they had imagined possible, so close that, from the highest lookout on the Ark, they were able with their telescopes to see very clearly where the water washed the barren mountain-sides at what seemed to be a stupendous elevation.

"I'm sorry about your shepherds," said Cosmo, smiling. "I don't think you'd find any there to rescue if you could get to them. They must all have been lost in the torrents that poured down those mountains."

"More's the pity," said Captain Arma. "That was a fine lot of women. There'll be no more chess like what they made at Treviso."

Cosmo inquired if the captain's acquaintance with the topography of the range enabled him to say how high that water was. The captain, after long inspection, declared that he felt sure that it was not less than four thousand feet above the old coast line.

"Then," said Cosmo, "if you're right about the elevation of what you call the Terra de Cerredo there must be four thousand six hundred and seventy feet of its upper part still out of water. We'll see if that is so."

Cosmo made the measurements with his instruments, and announced that the result showed the substantial accuracy of Captain Arma's guess.

"I suspected as much," he muttered. "Those tremendous downpours, which may have been worse elsewhere than where we encountered them, have increased the rise nearly seventy per cent above what my guess indicated. Now that I know this," he continued, addressing the captain: "I'll change the course of the Ark. I'm anxious to get into the Indian Ocean as soon as possible. It would be a great waste of time to go back in order to cross the Sahara, and with this increase of level it isn't necessary. We'll just cut out across southern France, keeping along north of the Pyrenees, and go down into the region of the Mediterranean."

Captain Arma was astonished by the boldness of this suggestion, and at first he strongly objected to their taking such a course.

"There's some pretty high ground in southern France," he said. "There's the Cevennes moun-

tains, which approach a good long way toward the Pyrenees. Are you sure the depth of water is the same everywhere?"

"What a question for an old mariner to ask!" returned Cosmo. "Don't you know that the level of the sea is the same everywhere? The flood doesn't make any difference. It seeks its level like any other water."

"But it may be risky steering between those mountains," persisted the captain.

"Nonsense! As long as the sky is clear you can get good observations, and you ought to be navigator enough not to run on a mountain."

Cosmo Veroli, as usual, was unshakable in his resolution—he only changed when he had reasons of his own—and the course of the Ark was laid, accordingly, for the old French coast of the Landes, so low that it was now covered with nearly four thousand feet of water. The feelings of the passengers were deeply stirred when they learned that they were actually sailing over buried Europe, and they gazed in astonishment at the water beneath them, peering down into it as if they sought to discover the dreadful secrets that it hid, and talking excitedly in a dozen languages.

The Ark progressed slowly, making not more than five or six knots, and on the second day after they dropped the *Peñas de Europa* they were passing along the northern flank of the Pyrenees and over the basin in which had lain the beautiful city of Pau. The view of the Pyrenees from this point had always been celebrated as one of the most remarkable in the world.

Now it had lost its beauty, but gained in spectacular grandeur. All of France, as far as the eye extended, was a sea, with long oceanic swells slowly undulating its surface. This sea abruptly came to an end where it met the mountains, which formed for it a coast unlike any that the hundreds of eyes which wonderingly surveyed it from the Ark had ever beheld.

Beyond the drowned vales and submerged ranges, which they knew lay beneath the watery floor, before them, rose the heads of the *Pic de Midi*, the *Pic de Car*, the *Pic de Nizor*, the *Massif du Gohizon*, the *Pic Mouné*, and dozens of other famous eminences, towering in broken ranks like the bear-skins of a "forlorn hope," resisting to the last, in pictures of old-time battles.

Here, owing to the configuration of the drowned land it was possible for the Ark to approach quite close to some of the wading mountains, and Cosmo seized the opportunity to make a new measure of the height of the flood, which he found to be surely not less than his former estimates had shown.

Surveying with telescopes the immense shoulders of the *Massif*, the *Vicos*, the *d'Arden*, and the nearer heights, when they were floating above the valley of Lourdes, Cosmo and the captain saw the terrible effects that had been produced by the torrents of rain, which had stripped off the vegetation whose green robe had been the glory of the high Pyrenees on the French side.

Presently their attention was attracted by some moving objects, and at a second glance they perceived that there were human beings.

"Good Heaven!" exclaimed Cosmo Versall. "There are survivors here. They have climbed the mountains, and found shelter among the rocks. I should not have thought it possible."

"And there are women among them," said Captain Arma, lowering his telescope. "You will not leave them there!"

"But what can I do?"

"Lower away the boats," replied the captain. "We've got plenty of them."

"There may be thousands there," returned Cosmo, musing. "I can't take them all."

"Then take as many as you can. By god, sir, I'd not leave 'em!"

By this time some of the passengers who had powerful glasses had discovered the refugees on the distant heights, and great excitement spread throughout the Ark. Cries arose from all parts of the vessel:

"Rescue them!" "Go to their aid!" "Don't let them perish!"

Cosmo Versall was in a terrible quandary. He was by no means without humanity, and was capable of deep and sympathetic feeling, as we have seen, but he already had as many persons in the Ark as he thought ought to be taken, considering the provision that had been made, and, besides, he could not throw off, at once, his original conviction of the necessity of carefully choosing his companions. He remained for a long time buried in thought, while the captain fumed with impatience, and at last declared that if Cosmo did not give the order to lower away the boats he would do it himself.

At length Cosmo, yielding rather to his own humane feelings than to the urging of others, consented to make the experiment. Half a dozen launches were quickly lowered and sent off, while the Ark, with slowed engines, remained describing a circle as near the mountains as it was safe to go. Cosmo himself embarked in the leading boat.

The powerful motors of the launches carried them rapidly to the high slopes where the unfortunate had sought refuge, and as they approached, and the poor fugitives saw that deliverance was at hand, they began to shout, and cheer, and cry, and many of them fell on their knees upon the rocks and stretched their hands toward the heavens.

The launches were compelled to move with great caution when they got near the rugged sides of the submerged mountains (it was the Payne Dufou on which the people had taken refuge), but the men aboard them were determined to effect the rescue, and they regarded no peril too deadly. At last Cosmo's launch found a safe landing, and the others quickly followed it.

When Cosmo sprang out on a flat rock a crowd of men, women, and children, weeping, crying, sobbing, and uttering prayers and blessings, instantly surrounded him. Some wrung his hand in an ecstasy of joy, some embraced him, some dropped on their knees before him and sought to kiss his hands. Cosmo could not restrain his tears, and the crews of the launches were equally affected.

Many of these people could only speak the patois of the mountains, but some were refugees from the

resorts in the valleys below, and among these were two English tourists who had been caught among the mountains by the sudden rising of the flood. They exhibited comparative *sang froid*, and served as spokesmen for the others.

"Bah Jove!" exclaimed one of them, "but you're welcome, you know! This has been a demolition close call! But what kind of a craft have you got out there?"

"I'm Cosmo Versall."

"Then that's the Ark we've heard about! Poo ha-ho, I should have recognized you, for I've seen your picture often enough. You've come to take us off, I suppose?"

"Certainly," replied Cosmo. "How many are there?"

"All that you see here; about a hundred I should say. No doubt there are others on the mountains round. There must have been a thousand of us when we started, but most of them perished, overcame by the downpour, or swept away by the torrents. Lord Swansdown (indicating his companion, who bowed gravely and stiffly) and myself—I'm Edward Whistlington—sat out to walk over the Pyrenees from end to end, after the excitement about the great darkness died out, and we got as far as the Markard, and then running down to Gavarde we heard news of the sea rising, but we didn't give too much credit to that, and afterward, keeping up in the heights, we didn't hear even a rumour from the world below.

"The sky opened on us like a broadside from an aerial squadron, and how we ever managed to get here I'm sure I can hardly tell. We were actually carried down the mountainsides by the water, and how it failed to drown us will be an everlasting mystery. Somehow, we found ourselves among these people, who were trying to go up, assuring us that there was nothing but water below. And at last we discovered some sort of shelter here—and here we've been ever since."

"You cannot have had much to eat," said Cosmo.

"Not too much, I assure you," replied the Englishman, with a melancholy smile. "But these people shared with us what little they had, or could find—anything and everything that was eatable. They're a devilish fine lot, I tell you!"

"When the terrible rain suddenly ceased and the sky cleared," he resumed, "we managed to get dry, after a day or two, and since then we've been chewing leather until there isn't a shoe or a belt left. We thought at first of trying to build rafts—but then where could we go? It wasn't any use to sail out over a drowned country, with nothing in sight but the mountains around us, which looked no better than the one we were barely existing on."

"Then I must get you aboard the Ark before you starve," said Cosmo.

"Many have died of starvation already," returned Whistlington. "You can't get us off too quick."

Cosmo Versall had by this time freed himself of every trace of the reluctance which he had at first felt to increasing the size of his ship's company by adding recruits picked up at random. His sympathies were thoroughly aroused, and while he hastened the landing and departure of the launches, he

asked the Englishmen who, with the impressive endurance of their race, stayed behind to the last, whether they thought that there were other refuges on the mountains whom they could reach.

"I dare say there are thousands of the poor devils on those peaks around us, wandering among the rocks," replied Edward Whistlington, "but I fancy you couldn't reach 'em."

"If I see any I'll try," returned Cosmo, sweeping with his telescope all the mountain flanks within view.

At last, on the slopes of the lofty Mount Alpa across the submerged valley toward the south, he caught sight of several human figures, one of which was plainly trying to make signals, probably to attract attention from the Ark. Immediately, with the Englishmen and the remainder of those who had been found on the Peyre Dufren, he hastened in his launch to the rescue.

They found four men and three women, who had escaped from the narrow valley containing the *baies de Gassat*, and who were in the last stages of starvation. These were taken aboard, and then, no more being in sight, Cosmo returned to the Ark, where the other launches had already arrived.

And these were the last that were rescued from the mighty range of the Pyrenees, in whose deep valleys had lain the famous resorts of Castetets, the *Eaux Bonnes*, the *Eaux Chaudes*, the *Bagnières de Luchon*, the *Bagnières de Biscarre*, and a score of others. No doubt, as the Englishmen had said, thousands had managed to climb the mountains, but none could now be seen, and these who may have been there were left to perish.

There was great excitement in the Ark on the arrival of the refugees. The passengers overwhelmed them with kind attentions, and when they had sufficiently recovered, listened with wonder and the deepest sympathy to their tales of suffering and terror.

Lord Swanadown and Edward Whistlington were amazed to find their king aboard the Ark, and the English members of the company soon formed a sort of family party, presided over by the unfortunate monarch. The rescued persons numbered, in all, one hundred and six.

The voyage of the Ark was now resumed, skirting the Pyrenees, but at an increasing distance. Finally Captain Arnes announced that, according to his observations, they were passing over the site of the ancient and populous city of Toulouse. This recalled to Cosmo Versail's memory the beautiful scenes of the fair and rich land that lay so deep under the Ark, and he began to talk with the captain about the glories of its history.

He spoke of the last great conqueror that the world had known, Napoleon, and was discussing his marvelous career, and referring to the fact that he had died on a rock in the midst of that very ocean which had now swallowed up all the scenes of his conquests, when the lookout telephoned down that there was something visible on the water ahead.

In a little while they saw it—a small moving object, which rapidly approached the Ark. As it drew nearer both exclaimed at once:

"The *Jules Verne!* Here comes the *Jules Verne!*"

There could be no mistaking it. It was riding with its bow just above the level of the sea; the French flag was fluttering from a small mast, and already they could perceive the form of *de Beauchamps*, standing in his old attitude, with his feet below the rim of the circular opening at the top. Cosmo ordered the Stars and Stripes to be displayed in salute, and, greatly pleased over the encounter, hurried below and had the companion-ladder made ready.

"He's got to come aboard this time, anyhow!" he exclaimed. "I'll take no refusal. I want to know that fellow better."

But this time *de Beauchamps* had no thought of refusing the hospitality of the Ark. As soon as he was within hearing he called out:

"My congratulations to M. Versail and his charming fellow voyagers. May I be permitted to come aboard and present myself in person? I have something deeply interesting to tell."

Everybody in the Ark who could find a standing-place was watching the *Jules Verne* and trying to catch a glimpse of its gallant captain, and to hear what he said; and the moment his request was preferred a babel of voices arose, amid which could be distinguished such exclamations as:

"Let him come!" "A fine fellow!" "Welcome, *de Beauchamps!*" "Hurrah for the *Jules Verne!*"

King Richard was in the fore rank of the spectators, waving his hand to his preserver.

"Certainly you can come aboard," cried Cosmo heartily, at the same time hastening the preparations for lowering the ladder. "We are all glad to see you. And bring your companions along with you."

## CHAPTER XIX.

### To Paris Under the Sea

**D**E BEAUCHAMPS accepted Cosmo Versail's invitation to bring his companions with him into the Ark. The submersible was safely moored alongside, where she rode easily in company with the larger vessel, and all mounted the companion-ladder. The Frenchman's six companions were dressed, like himself, in the uniform of the army.

"Curious," muttered Captain Arnes in Cosmo's ear, "that these soldiers should be the only ones to get off—and in a vessel, too. What were the seamen about?"

"What were our seamen about?" returned Cosmo. "How many of them got off? I warned them that ships would not do. But it was a bright idea of this *de Beauchamps* and his friends to build a submersible. It didn't occur to me, or I would have advised their construction everywhere for small parties. But it would never have done for us. A submersible would not have been capacious enough for the party I wanted to take."

By this time the visitors were aboard, and Cosmo and the others who could get near enough to grasp them by the hand greeted them effusively. King Richard received *de Beauchamps* with emotion, and thanked him again and again for having saved

his life; but, in the end, he covered his face and said in a broken voice:

"M. de Beauchamps, my gratitude to you is very deep—but, oh, the queen—the queen—and the children! I should have done better to perish with them."

Cosmo and de Beauchamps soothed him as well as they could, and the former led the way into the great saloon, in order that as many as possible might see and greet their visitors, who had come so mysteriously up out of the sea.

All of the Frenchmen were as affable as their leader, and he presented them in turn. De Beauchamps conversed almost gaily with such of the ladies as had sufficient command of their feelings to join the throng that pressed about him and his companions. He was deeply touched by the story of the recent rescue of his countrymen from the Pyrenees, and he went among them, trying to cheer them up, with the idea that no misfortune can eradicate from the Gallic nature.

At length Cosmo reminded him that he had said that he had some interesting news to communicate.

"Yes," said de Beauchamps, "I have just come from a visit to Paris."

Exclamations of amazement and incredulity were heard on all sides.

"It is true," resumed the Frenchman, though now his voice lost all its gaiety. "I had conceived the project of such a visit before I met the Ark and transferred His Majesty, the King of England, to your care. As soon as that was done I set out to make the attempt."

"But tell me first," interrupted Cosmo, "how you succeeded in finding the Ark again?"

"That was not very difficult," replied de Beauchamps, smiling. "Of course, it was to some extent accidental, for I didn't know that you would be here, navigating over France; but I had an idea that you might come this way if you had an intention of seeing what had happened to Europe. It is my regular custom to rise frequently to the surface to take a look around and make surer of my bearings, and you know that the Ark makes a pretty large point on the waters. I saw it long before you caught sight of me."

"Very well," said Cosmo. "Please go on with your story. It must, indeed, be an extraordinary one."

"I was particularly desirous of seeing Paris again, deep as I knew her to lie under the waves," resumed de Beauchamps, "because it was my home, and I had a house in the Champs Elysees. You cannot divorce the heart of a Frenchman from his home, though you should bury it under twenty oceans."

"Your family were lost?"

"Thank God, I had no family. If I had had they would be with me. My companions are all like myself in that respect. We have lost many friends, but no near relatives. As I was saying, I started for France, poor drowned France, as soon as I left you. With the powerful search-light of the *Jules Verne* I could feel confident of avoiding obstructions; and, besides, I knew very clearly the height to which the flood had risen, and having the topog-

raphy of my country at my fingers' ends, as does every officer of the army, I was able to calculate the depth at which we should run in order to avoid the hillsaps."

"But surely," said Cosmo, "it is impossible—at least, it seems so to me—that you can descend to any great depth—the pressure must be tremendous a few hundred feet down, to say nothing of possible thousands."

"All that," replied the Frenchman, "has been provided for. You probably do not know to what extent we had carried experiments in France on the deep submersion of submarines before their general abandonment when they were prohibited by International agreement in war. I was myself perhaps the leader in those investigations, and in the construction of the *Jules Verne* I took pains to improve on all that had hitherto been done."

"Without going into any description of my devices, I may simply remind you that nature has pointed out ways of avoiding the consequences of the incalculable pressures which calculation indicates at depths of a kilometer, or more, in her construction of the deep-sea fishes. It was by a study of them that I arrived at the secret of both penetrating to depths that would theoretically have seemed entirely impossible and of remaining at such depths."

"Marvelous!" exclaimed Cosmo; "marvelous beyond belief!"

"I may add," continued de Beauchamps, smiling at the effect that his words had had upon the mind of the renowned Cosmo Verani, "that the peculiar properties of berium, which you so wisely chose for your Ark, aided me in quite a different way. But I must return to my story."

"We passed over the coast of France near the point where I knew lay the mouth of the Loire. I could have found my way by means of the compass sufficiently well; but since the sky was clear I frequently came to the surface in order, for greater certainty, to obtain sights of the sun and stars."

"I dropped down at Tours and at Blois, and we plainly saw the walls of the old châteaux in the gloom of the search-light below us. There were monsters of the deep, such as the eye of man never beheld, swimming slowly about them, many of them throwing a strange luminescence into the water from their phosphorescent organs, as if they were inspecting those novelties of the sea-bottom."

"Arriving over Orleans, we turned in the direction of Paris. As we approached the site of the city I sank the submarine until we almost touched the higher hills. My search-light is so arranged that it can be directed almost every way—up, down, to this side, and to that—and we swept it round us in every direction."

"The light readily penetrated the water and revealed sights which I have no power to describe, and some—reminders of the immense population of human beings which had there met its end—which I would not describe if I could. To see a drowned face suddenly appear outside the window, almost within touch—ah, that was too horrible!"

"We passed over Versailles, with the old palace still almost intact; over Reims, with its porcelain

manufactory yet in part standing—the tidal waves that had come up the river from the sea evidently caused much destruction just before the downpour began—and finally we 'entered' Paris.

"We could see the embankments of the Seine beneath us as we passed up its course from the Point du Jour. From the site of the Champ de Mars I turned northward in search of the older part of the *Champs Elysees*, where my house was, and we came upon the great *Arc de Triomphe*, which, you remember, dates from the time of Napoleon.

"It was apparently uninjured, even the huge bronze groups remaining in their places, and the search-light, traversing its face, fell upon the heroic group of the *Marseillaise* on the east facade. You must have seen that, M. Versail?"

"Yes, many a time," Cosmo replied. "The fury in the face of the female figure representing the spirit of war, chanting the '*Marseillaise*,' and, sword in hand, sweeping over the heads of the soldiers, is the most terrible thing of human making that I ever looked upon."

"It was not so terrible as another thing that our startled eyes saw there," said de Beauchamps. "Coiled round the upper part of the *Arc*, with its head resting directly upon that of the figure of which you speak, was a monstrous, ribbon-shaped creature, whose flat, reddish body, at least a meter in width and apparently thirty meters long, and bordered with a sort of scoting frill of a pinkish color, undulated with a motion that turned us sick at heart.

"But the head was the most awful object that the fancy of a madman could conceive. There were two great round, projecting eyes, encircled with what I suppose must have been phosphorescent organs, which spread around in the water a green light that was absolutely horrifying.

"I turned away the search-light, and the eyes of that creature stared straight at us with a dreadful, stony look; and then the effect of the phosphorescence, heightened by the absence of the greater light, became more terrible than before. We were numbed, and I hardly had nerve enough to turn the submersible away and hurry from the neighborhood."

"I had not supposed," said Cosmo, "that creatures of such a size could live in the deeper parts of the sea."

"I know," returned de Beauchamps, "that many have thought that the athermal creatures were generally of small size, but they knew nothing about it. What could one have expected to learn of the secrets of life in the ocean depths from the small creatures which alone the trawls brought to the surface? The great monsters could not be captured in that way. But we have seen them—seen them taking possession of beautiful, drowned Paris—and we know what they are."

The fascinated hearer who had crowded about to listen to the narrative of de Beauchamps shuddered at this part of it, and some of the women turned away with exclamations of horror.

"I see that I am drawing my picture in too fearful colors," he said, "and I shall refrain from telling of the other inhabitants of the abyss that

we found in possession of what I, as a Frenchman, must call the most splendid capital that the world contained.

"Oh, to think that all that beauty, all those great palaces filled with the masterworks of art, all those proud architectural pinnacles, all that scene of the most joyous life that the earth contained, is now become the dwelling-place of the terrible furies of the deep, creatures that never saw the sun; that never felt the transforming force of the evolution which had made the face of the globe so glorious; that never quitted their athermal homes until this awful flood spread their empire over the whole earth!"

There was a period of profound silence while de Beauchamps's face worked spasmodically under the influence of emotions, the sight of which would alone have sufficed to convince his hearers of the truth of what he had been telling. Finally Cosmo Versail, breaking the silence, asked:

"Did you find your home?"

"Yes. It was there. I found it out. I illuminated it with the search-light. I gazed into the broken windows, trying to peer through the watery medium that filled and darkened the interior. The roof was broken, but the walls were intact. I thought of the happy, happy years that I had passed there when I had a family, and when Paris was an Eden, the sunshine of the world. And then I wished to see no more, and we rose out of the midst of that sunken city and sought the daylight far above.

"I had thought to tell you," he continued, after a pause, "of the condition in which we found the great monuments of the city—of the Pantheon, yet standing on its hill with its roof crushed in; of *Notre Dame*—a wreck, but the towers still standing proudly; of the old palace of the Louvre, through whose broken roofs and walls we caught glimpses of the treasures washed by the water within—but I find that I have not courage to go on. I had imagined that it would be a relief to speak of these things, but I do not find it so."

"After leaving Paris, then, you made no other explorations?" said Cosmo.

"None. I would have had no heart for more. I had seen enough. And yet I do not regret that I went there. I should never have been content not to have seen my beautiful city once more, even lying in her watery shroud. I loved her living; I have seen her dead. It is finished. What more is there, M. Versail?" With a sudden change of manner: "You have predicted all this, and perhaps you know more. Where do we go to die?"

"We shall not die," replied Cosmo Versail forcefully. "The Ark and your *Jules Verne* will save us."

"To what purpose?" demanded the Frenchman, his animation all gone. "Can there be any pleasure in floating upon or beneath the waves that cover a lost world? Is a brief prolongation of such a life worth the effort of grasping for it?"

"Yes," said Cosmo with still greater energy. "We may still save the race. I have chosen most of my companions in the Ark for that purpose. Not only may we save the race of man, but we may lead it up upon a higher plane; we may apply the principles of evolution as they have never yet been applied. You, M. de Beauchamps, have shown that you are

of the stock that is required for the regeneration of the world."

"But where can the world be regenerated?" asked de Beauchamps with a bitter laugh. "There is nothing left but mountain-tops."

"Even they will be covered," said Cosmo.

"Do you mean that the deluge has not yet reached its height?"

"Certainly it has not. We are in an open space in the enveloping nebula. After a little we shall enter the nucleus, and then will come the worst."

"And yet you talk of saving the race!" exclaimed the Frenchman with another bitter laugh.

"I do," replied Cosmo, "and it will be done."

"But how?"

"Through the reemergence of land."

"That recalls our former conversation," put in Professor Abel Able. "It appears to me impossible that, when the earth is once covered with a universal ocean, it can ever disappear or materially lower its level. Geological ages would be required for the level of the water to be lowered even a few feet by the escape of vapor into space."

"No," returned Cosmo Verrell, "I have demonstrated that that idea is wrong. Under the immense pressure of an ocean rising six miles above the ancient sea level the water will rapidly be forced into the interstices of the crust, and thus a material reduction of level will be produced within a few years—five at the most. That will give us a foothold. I have no doubt that even now the water around us is slightly lowering through that cause."

"But in itself that will not be sufficient. I have gone all over this ground in my original calculations. The intrusion of the immense mass of ocean water into the interior of the crust of the earth will result in a great geological upheaval. The lands will reemerge above the new sea level as they emerged above the former one through the internal stresses of the globe."

The scientific men present listened with breathless interest, but some of them with many incredulous shakings of the head.

"You must be aware," continued Cosmo, addressing them particularly, "that it has been demonstrated that the continents and the great mountain ranges are heaved up, and, as it were, are floating somewhat like slugs on the internal magma. The mean density of the crust is less under the land and the mountains than under the old seabeds. This is especially true of the Himalayan region."

"That uplift is probably the most recent of all, and it is there, where at present the highest land of the globe exists, that I expect that the new upheaval will be most strongly manifested. It is for that reason, and not merely because it is now the highest part of the earth, that I am going with the Ark to Asia."

"But," said Professor Jeremiah Moses, "the upheaval of which you speak may produce a complete revolution in the surface of the earth, and if new lands are upthrust they may appear at unexpected points."

"Not at all," returned Cosmo. "The tectonic features of the globe were fixed at the beginning.

As Asia has hitherto been the highest and the greatest mass of land, it will continue to be so in the future. It is there, believe me, that we shall replant the seed of humanity."

"Do you not think," asked Professor Alexander Jones, "that there will be a tremendous outburst of volcanic energy, if such upheavals occur, and may not that render the reemerging lands uninhabitable?"

"No doubt," Cosmo replied, "every form of plastic energy will be immensely reinforced. You remember the recent outburst of all the volcanoes when the sea burst over the borders of the continents. But these forces will be mainly expended in an effort of uplifting. Unquestionably there will be great volcanic storms, but they will not prevent the occupation of the broadening areas of land which will not be thus affected."

"Upon these lands," exclaimed Sir Wilfrid Athelstone, in a loud voice, "I will develop life from the barren minerals of the crust. The age of chemical perithenogenesis will then have dawned upon the earth, and man will have become a creator."

"Will the Sir Englishman give me room for a word?" cried Costaké Tharide, raising his tall form on his toes and agitating his arms in the air. "He will create not anything! It is I that will release the energies of the atoms of matter and make of the new man a new god."

Cosmo Verrell quailed the incipient outbreak of his jealous "apocalyptic passion," and the discussion of his theory was continued for some time. At length de Beauchamps, shrugging his shoulders, exclaimed, with a return of his habitual gaiety:

"Très bien! Five the world of Cosmo Verrell! I salute the new Eve that is to come!"

## CHAPTER XX

### The Adventure in Colorado

WHEN Professor Pladder, the President and their companions on the aircraft, saw the three men on the bluff motioning and shouting to them, they immediately sought the means of bringing their craft to land. This did not prove to be exceedingly difficult, for there was a convenient rock with deep water around it on which they could disembark.

The men ran down to meet them, and to help them ashore, exhibiting the utmost astonishment at seeing them there.

"What in creation did you come from?" exclaimed one, giving the professor a pull up the bank. "Mih-be you're Cosmo Verrell, and that's yer Ark?"

"I'm Professor Pladder, and this is the President of the United States."

"The President of the Un— See here, stranger, I'll take considerable from you, considering the fix yer in, but you don't want to go too far."

"It's true," answered the Professor. "This gentleman is the President, and we've escaped from Washington. Please help the ladies."

"Thi help the ladies all right, but I'm blamed if I believe yer yarn. How'd you git here? You couldn't hev floated across the continent on that thing."

"We came on the raft that you see," interrupted Mr. Samson. "We left the Appalachian Mountains two weeks ago."

"Well, hy—it must be true!" muttered the man. "They couldn't have come from anywhere else in that direction. I reckon the hull blamed continent is under water!"

"So it is," said Professor Fludder, "and we made for Colorado knowing that it was the only land left above the flood."

All finally got upon the bluff, rejoiced to feel solid ground once more beneath their feet. But it was a desolate prospect that they saw before them. The face of the land had been scoured and gullied by the pouring waters, the vegetation had been stripped off, except where in hollows it had been covered with new-formed lakes, some of which had drained off after the downpour ceased, the water finding its way into the surrounding sea.

They asked the three men what had become of the other inhabitants, and whether there was any shelter at hand.

"We've been wiped out," said the original spokesman. "Cosmo Verall has done a pretty clean job with his flood. There's a kind of a cover that we three have built, a ways back yonder, out o' timber o' one kind and another that was lodged about. But it wouldn't amount to much if there was another cloudburst. It wouldn't stand a minute. It's good to sleep in."

"Are you the only survivors in this region?" asked the President.

"I reckon you see all tho't's left of us. The' ain't one out o' a hundred tho't's left alive in these parts."

"What became of them?"

"Sweept off!" replied the man, with an expressive gesture—"and drowned right out under the sky."

"And how did you and your company escape?"

"By gitting up amongst some rocks that was higher'n the average."

"How did you manage to live—what did you have to eat?"

"We didn't eat much—we didn't hev much time to think o' eatin'. We had one heox with us, and he served, when his time come. After the sky cleared we skrimbled about and dug up something that we could manage to eat, lodged in gulches where the water had washed together what had been in houses and cellars. We've got a gun and a little ammunition, and once in a while we could kill an animal that had contrived to escape somewher."

"And you think that there are no other human beings left alive anywhere around here?"

"I know th' ain't. The's probably some up in the foot-hills, and around the Pike. They had a better chance to git among rocks. We had just made up our minds to go hunking for 'em when we hatched sight o' you, and then we concluded to stay and see who you was."

"I'm surprised that you didn't go sooner."

"We couldn't. There was a mearin' torrent coming down from the mountains that cut us off. It's only last night that it stopped."

"Well, it's evident that we cannot stay here," said Professor Fludder. "We must go with these

men toward the mountains. Let us take what's left of the compressed provisions out of the raft, and then we'll eat a good meal and be off."

The three men were invited to share the repast, and they ate with an appetite that would have amazed their hosts if they had not been so anxious to reserve as much as possible of their provisions for future necessities.

The meal finished, they started off, their new friends aiding to carry provisions, and what little extra clothing there was. The aspect of the country they traversed affrighted them. Here and there were partially demolished houses or farm structures, or cellars, choked with debris of what had once been houses.

Farm implements and machinery were scattered about and half buried in the torrent-furrowed land. In the wreck of one considerable village through which they passed they found a stone church, and several stone houses of considerable pretensions, standing almost intact as to walls, but with roofs, doors and windows smashed and torn off.

It was evident that this place, which lay in a depression of the land, had been buried by the rushing water as high as the top stories of the buildings. From some of the signs that they saw they shrank away, and afterward tried to forget them.

owing to the presence of the women and children their progress was slower than it might otherwise have been. They had great difficulty in crossing the course of the torrent which their companions had described as cutting them off from the foot-hills of the Pike's Peak range.

The water had washed out a veritable cañon, a hundred or more feet deep in places, and with ragged, precipitous walls and banks, which they had to descend on one side and ascend on the other. Here the skill and local knowledge of their three new-found friends stood them in good stead. There was yet enough water in the bottom of the great gully to compel them to wade, carrying the women and children.

But, just before nightfall, they succeeded in reaching a range of rocky heights, where they determined to pass the night. They managed to make a fire with brush that had been swept down the mountain flanks and had remained wedged in the rocks, and thus they dried their soaked garments, and were able to do some cooking, and to have a blaze to give them a little heat during the night, for the air turned cold after the disappearance of the sun.

When the others had sunk into an uneasy slumber, the President and Professor Fludder sat long, replenishing the fire, and talking of their future course.

"I think," said the professor, "that we shall find a considerable population alive among the mountains. There is nothing in Colorado below four thousand feet elevation, and not much below five thousand. The great lower 'parks' were probably turned into lakes, but they will drain off, as the land around us here has done already."

"Those who managed to find places of comparative shelter will now descend into the level lands and



try to hunt up the site of their homes. If only some plants and grains have been preserved they can, after a fashion, begin to cultivate the soil."

"But there is no soil," said the President, shuddering at the recollection of the devastation he had witnessed. "It has all been washed off."

"No," replied the professor, "there's yet a good deal in the low places, where the water rested."

"But it is now the middle of winter."

"Reckoned by the almanac it is, but you see that the temperature is that of summer, and has been such for months. I think that this is due in some way to the influence of the nebula, although I cannot account for it. At any rate it will be possible to plant and sow."

"The whole body of the atmosphere having been raised four thousand feet, the atmospheric conditions here now are virtually the same as at the former sea-level. If we can find the people and reassure them, we must take the lead in restoring the land to fertility, and also in the reconstruction of homes."

"Suppose the flood should recommence?"

"There is no likelihood of it."

"Then," said the President, putting his face between his hands and gazing sadly into the fire, "here is all that remains of the mightiest nation of the world, the richest, the most populous—and we are to build up out of this remnant a new fatherland."

"This is not the only remnant," said Professor Pladder. "One-quarter, at least, of the area of the United States is still above sea-level. Think of Arizona, New Mexico, Utah, Nevada, the larger part of California, Wyoming, a part of Montana, two-thirds of Idaho, a half of Oregon and Washington—all above the critical level of four thousand feet, and all except the steepest mountain-sides can be reclaimed."

"There is hope for our country yet. Remember that the climate of this entire region will now be changed, since the barometric pressure have been lifted up, and the line of thirty inches pressure now marks the edge of the Colorado plateau. There may be a corresponding change in the rainfall and in all the conditions of culture and fertility."

"Yes," sighed the President, "but I cannot, I cannot withdraw my mind from the thought of the millions, millions, millions who have perished!"

"I do not say that we should forget them," replied Professor Pladder; "Heaven forbid! But I do say that we must give our attention to those that remain, and turn our faces steadily toward the future."

"Able!" returned the President, pressing the professor's hand, "you are right. My confidence in you was shaken, but now I follow you again."

Thus they talked until midnight, and then got a little rest with the others. They were up and off at break of day, and as they mounted higher they began to encounter immense rocks that had come tumbling down from above.

"How can you talk of people escaping toward the mountains if they had to encounter these?" demanded the President.

"Some of these rocks have undoubtedly been

brought down by the torrents," Professor Pladder replied, "but I believe that the greater number fell earlier, during the earthquakes that accompanied the first invasions of the sea."

"But these earthquakes may have continued all through."

"I do not think so. We have felt no trembling of the earth. I believe that the convulsions lasted only for a brief period, while the rocks were yielding to the pressure along the old sea-coast. After a little the crust below adjusted itself to the new conditions. And even if the rocks fell while people were trying to escape from the flood below, they must, like the water, have followed the gorges and hollow places, while the fugitives would, of course, keep upon the ridges."

Whatever perils they may have encountered, people had certainly escaped as the professor had averred. When the party, in the middle of the day, were seated at their lunch, on an elevated point from which they could see far over the strange ocean that they had left behind them, while the southern buttresses of Pike's Peak rose steeply toward the north, they discovered the first evidence of the existence of refugees in the mountains. This was a smoke rising over an intervening ridge, which their new companions declared could be due to nothing less than a large camp-fire.

They hastened to finish their meal, and then climbed the ridge. As soon as they reached it they found themselves looking down into a broad, shallow cañon, where there were nearly twenty rudely constructed cabins, with a huge fire blazing in the midst of the place, and half a dozen red-shirted men busy about it, evidently occupied in the preparation of the dinner of a large party.

Their friends recognized an acquaintance in one of the men below and hailed him with delight. Instantly men, women and children came running out of the hole to look at them, and as they descended into this improvised village they were received with a hospitality that was almost hilarious.

The refugees consisted of persons who had escaped from the lower lands in the immediate vicinity, and they were struck dumb when told that they were entertaining the President of the United States and his family.

The entire history of their adventures was related on both sides. The refugees told how, at the commencement of the great rain, when it became evident that the water would inundate their farms and buildings, they loaded themselves with as many provisions as they could carry, and, in spite of the suffocating downpour that filled the air, managed to fight their way to the ridge overhanging the deep cut in which they were now ensconced.

Hardly a quarter of those who started arrived in safety. They sheltered themselves to the number of about thirty, in a huge cavern, which faced down the mountain, and had a slightly upward sloping floor, so that the water did not enter. Here, by careful economy, they were able to die out their provisions until the sky cleared, after which the men, being used to outdoor labor and hunting, contrived to supply the wants of the forlorn little community.

They managed to kill a few animals, and found that the bodies of others recently killed, or drowned. Later they descended into the lowlands, as the water ran off, and searching among the ruins of their houses found some remnants of supplies in the cellars and about the foundations of the barns. They were preparing to go down in a body and seek to reestablish themselves on the sites of their old homes, when the President's party came upon them.

The meeting with these refugees was but the first of a series of similar encounters on the way along the eastern face of the Pike's Peak range. In the aggregate they met several hundred survivors who had established themselves on the site of Colorado Springs, where a large number of houses, standing on the higher ground, had escaped.

They had been soaked with water, descending through the shattered roofs and broken windows, and pouring into the basements and cellars; the fugitives came from all directions, some from the caverns on the mountains, and some from the rocks toward the north and east. A considerable number asserted that they had found refuge in the Garden of the Gods.

As near as could be estimated, about a quarter of the population remained alive. The strong points of Professor Pludder now, once more, came out conspicuously. He proved himself an admirable organizer. He explored all the country round, and exhorted everybody, setting them to work to repair the damage as much as possible.

Some houses and cattle were found which, following their instincts, had managed to escape the flood. In the houses and other buildings yet standing a great deal of food and other supplies was discovered, so that there was no danger of a famine. As he had anticipated, the soil had not all been washed away from the flat land, and he advised the inhabitants to plant quick-growing seeds at once.

He utilized the horses to send couriers in all directions, some going even as far as Denver. Everywhere virtually the same conditions were found—many had escaped and were alive, only needing the guidance of a quicker intelligence, and this was supplied by the advice which the professor instructed his envoys to spread among the people. He sought to cheer them still more by the information that the President was among them, and looking out for their welfare.

One thing which his couriers at last began to report to him was a cause of surprise. They said that the level of the water was rapidly falling. Some who had gone far toward the east declared that it had gone down hundreds of feet. But the professor reflected that this was impossible, because evaporation could not account for it, and he could not persuade himself that so much water could have found its way into the interior of the crust.

He concluded that his informants had allowed their hopes to affect their eyesight, and, strong as usual in his professional dogmas, he made no personal examination. Besides, Professor Pludder was beginning to be shaken in his first belief that all trouble from the nebula was at an end. Once having been forced to accept the hypothesis that a

watery nebula had met the earth, he began to reflect that they might not be through with it.

In any event, he deemed it wise to prepare for it if it should come back. Accordingly he advised that the population that remained should concentrate in the stronger houses, built of stone, and that every effort should be made to strengthen them further and to make the roofs as solid as possible. He also directed that no houses should be occupied that were not situated on high ground, surrounded with slopes that would give ready flow to the water in case the deluging rain should recommence.

He had no fixed conviction that it would recommence, but he was uneasy, owing to his reflections, and wished to be on the safe side. He sent similar instructions as far as his horsemen could reach.

The wisdom of his doubts became manifest about two weeks after the arrival of the President's party. Without warning the sky, which had been perfectly blue and cloudless for a month, turned a sickly yellow. Then mists hid the head, and in a little while the entire outline of Pike's Peak, and after that a heavy rain began.

Terror instantly seized the people, and at first nobody ventured out of doors. But as time went on and the rain did not assume the proportions of the former deluge, although it was very heavy and continuous, hope revived. Everybody was on the watch for a sudden clearing up.

Instead of clearing, however, the rain became very irregular, gushing at times in torrents which were even worse than the original downpour, but these tremendous gushes were of brief duration, so that the water had an opportunity to run off the higher ground before the next downpour occurred.

This went on for a week, and then the people were terrified at finding that water was pouring up through all the depressions of the land, cutting off the highlands from Pike's Peak with an arm of the sea. It was evident that the flood had been rapidly rising, and if it should rise but little higher they would be caught in a trap. The inland sea, it was clear, had now invaded the whole of Colorado to the feet of the mountains, and was creeping up on them.

Just at this time a series of earthquakes began. They were not severe, but were continuous. The ground cracked open in places, and some houses were overthrown, but there were no well-shattering shocks—only a continual and dreadful trembling, accompanied by awful subterranean sounds.

This terrible state of affairs had lasted for a day before a remarkable discovery was made, which filled many hearts with joy, although it seemed to puzzle Professor Pludder as much as it rejoiced him.

The new advance of the sea was arrested! There could be no question of that, for too many had anxiously noted the points to which the water had attained.

He have said that Professor Pludder was puzzled. He was seeking, in his mind, a connection between the seismic tremors and the cessation of the advance of the sea. Inasmuch as the downpour continued, the flood ought still to rise.

He rejected as soon as it occurred to him the idea that the earth could be drinking up the waters as fast as they fell, and the idea that the trembling

was an accompaniment of this gigantic degradation. Sitting in a room with the President and other members of the party from Washington, he remained buried in his thoughts, answering inquiries only in monosyllables. Presently he opened his eyes very wide and a long-drawn "A-ah!" came from his mouth. Then he sprang to his feet and cried out, but only as if uttering a thought aloud to himself: "The batholite!"

## CHAPTER XXI

### "The Father of Horror"

AT the time when the President of the United States and his companions were beginning to discover the refugees around Pilo's Peak, Cosmo Veratti's Ark accompanied by the *Jules Verne*, whose commander had decided to remain in touch with his friends, was crossing the submerged hills and valleys of Langsdoe under a sun as brilliant as that which had once made them a land of gold. De Beauchamps remained aboard the Ark much of the time.

Cosmo liked to have him with himself and Captain Arns on the bridge, because there they could talk freely about their plans and prospects, and the Frenchman was a most entertaining companion.

Meanwhile, the passengers in the saloons and on the promenade decks formed little knots and coteries for conversation, for reading, and for mutual diversion, or strolled about from side to side, watching the endless expanse of waters for the occasional appearance of some inhabitant of the deep that had wandered over the new ocean's bottom.

These seemed to be coming to the surface to get bearings. Every such incident reminded them of what lay beneath the waves, and led them to think and talk of the awful fate that had overwhelmed their fellow men, until the spirits of the most careless were subdued by the prevailing melancholy.

King Richard, strangely enough, had taken a liking for Amos Blank, who was frequently asked to join the small and somewhat exclusive circle of compatriots that continually surrounded the fallen monarch. The millionaire and the king often leaned elbow to elbow over the rail, and put their heads companionably together while pointing out some object on the sea. Lord Swansdown felt painfully cut by this, but, of course, he could offer no objection.

Finally Cosmo invited the king to come upon the bridge, from which passengers were generally excluded, and the king insisted that Blank should go, too. Cosmo consented, for Blank seemed to him to have become quite a changed man, and was sometimes full of practical suggestions.

So it happened that when Captain Arns announced that the Ark was passing over the ancient city of Carassome, Cosmo, the king, de Beauchamps, Amos Blank, and the captain were all together on the bridge. When Captain Arns mentioned their location, King Richard became very thoughtful. After musing for a time he said:

"Ah! how all these names, Troubadour, Carassome, Langsdoe, bring back to me the memory of my namesake of olden times, Richard I of England. This, over which we are floating, was the land of the

Troubadours, and Richard was the very Prince of Troubadours. With all his faults England never had a king like him!"

"Knowing your devotion to peace, which was the reason why I wished you to be of the original company in the Ark, I am surprised to hear you say that," said Cosmo.

"Ah! But Count de Lion was a true Englishman, even in his love of fighting. What would he say if he knew where England lies to-day? What would he say if he knew the awful fate that had come upon this fair and pleasant land, from whose poets and singers he learned the art of minstrelsy?"

"He would say, 'Do not despair,'" returned Cosmo. "Show the courage of an Englishman, and fight for your race if you cannot for your country!"

"But may not England, may not all these lands, emerge again from the floods?" asked the king.

"Not in our time, not in our children's time," replied Cosmo Veratti, thoughtfully shaking his head. "In the remote future, yes—but I cannot tell how remote. Tibet was once an appanage of your crown, before China taught the West what was meant, and in Tibet you may help to found a new empire, but I must tell you that it will not resemble the empires of the past. Democracy will be its cornerstone, and science its law.

"Then I devote myself to democracy and science," responded King Richard.

"Good! Admirable!" exclaimed Amos Blank and de Beauchamps simultaneously, while Captain Arns seemed on the point of patting the king on the back. But his attention, together with that of the others, was distracted by a huge whale blowing almost directly in the course of the Ark.

"Eloosed if I ever expected to see a sight like that in these parts!" exclaimed the captain. "This lifting the ocean up into the sky is upsetting the order of nature. I'd as soon expect to sight a cabinot on top of the Rocky Mountains."

"They'll be there, too, before long," said Cosmo.

"I wonder what he's looking for," continued Captain Arns. "He must have come down from the north. He couldn't have got to through the Pyrenees or the Sierra Nevada. He's just navigated right over the whole country, straight down from the channel!"

The whale rounded at the approach of the Ark, but in a little while he was blowing again off toward the south, and then the passengers caught sight of him, and there was great excitement.

He seemed to be of enormous size, and he sent his fountain to an extraordinary height in the air. On he went, appearing and disappearing, steering direct for Africa, until, only with glances, could they see his white plume blowing on the horizon.

Not even the reflection that they themselves were sailing over Europe impressed some of the passengers with so vivid a sense of their situation as the sight of this monstrous inhabitant of the ocean taking a view of his new domain.

At night Cosmo continued the concerts and the presentation of the Shakespearean dramas, and for an hour each afternoon he had a "conference" in the saloon, at which Theriade and Sir Athelstone were almost the sole performers.

Their disputes, and Cosmo's efforts to keep the peace, amused for a while, but at length the audiences diminished until Cosmo himself, with his constant companions, the Frenchman, the king, Arnes Blank, the three professors from Washington, and a few other savants were the only listeners.

But the music and the plays always drew immensely. Joseph Smith was kept busy most of the time in Cosmo's cabin, copying plans for the regeneration of mankind.

When they knew that they had passed over the borders of France and were sailing above the Mediterranean Sea, it became necessary to lay their course with considerable care. Cosmo decided that the only safe plan would be to run south of Sardinia, and then keep along between Sicily and Tunis, and so on toward lower Egypt.

There he intended to seek a way over the mountains north of the Sinai peninsula into the Syrian desert, from which he could reach the ancient valley of the Euphrates and the Persian Gulf. He would then pass down the Arabian Sea, swing round India, and Ceylon, and, by way of the Bay of Bengal and the plains of the Ganges and Brahmaputra, approach the Himalayas.

Captain Arnes was rather inclined to follow the Gulf of Suez and the depression of the Red Sea, but Cosmo was afraid that they would have difficulty in getting the Ark safely through between the Mt. Sinai peaks and the Jabel Ghauri range.

"Well, you're the commander," said the captain at the end of the discussion, "but hang me if I'd not rather follow a sea, where I know the course, than go navigating over mountains and deserts in the land of Shinar. We'll land on top of Jerusalem yet, you'll see!"

Feeling sure of plenty of water under keel, they now made better speed, and de Beauchamps retired into the Jules Verne, and detached it from the Ark, finding that he could distance the latter easily with the scorchable running just beneath the surface of the water.

"Come up to blow, and take a look around from the bridge, once in a while," the captain called out to him as he disappeared and the cover closed over him. The Jules Verne immediately sank out of sight.

They passed round Sardinia, and between the old African coast and Sicily, and were approaching the Malta Channel, when their attention was drawn to vast smoke far off toward the north.

"It's Etna in eruption," said Cosmo to the captain.

"A magnificent sight!" exclaimed King Richard, who happened to be on the bridge.

"Yes, and I'd like to see it nearer," remarked Cosmo, as a wonderful column of smoke, as black as ink, seemed to shoot up to the very zenith.

"You'd better keep away," Captain Arnes said warningly. "There's no good chance of foisting round volcanoes in a ship."

"Oh, it's safe enough," returned Cosmo. "We can run right over the southeastern corner of Sicily and get as near as we like. There is nothing higher than about three thousand feet in that part of the island, so we'll have a thousand feet to spare."

"But maybe the water has lowered somewhat,"

"Not more than a foot or two," said Cosmo. "Go ahead."

The captain plainly didn't fancy the adventure, but he obeyed orders, and the Ark's nose was turned northward, to the delight of many of the passengers who had become greatly interested when they learned that the tremendous smoke that they saw came from Mount Etna. Some of them were nervous.

The more adventurous spirits heartily applauded Cosmo Verne's design to give them a closer view of so extraordinary a spectacle. Even from their present distance the sight was one that might have filled them all with terror if they had not already been through adventures which had hardened their nerves. The smoke was truly terrific in appearance.

It did not spread low over the sea, but rose in an almost vertical column, widening out at a height of several miles, until it seemed to canopy the whole sky toward the north.

It could be seen spinning in immense rolling masses, the outer part of which were turned by the sunshine to a dingy brown color, while the main stem of the column, rising directly from the great crater, was of pitchy blackness.

An awful roaring was audible, sending a shiver through the Ark. At the bottom of the mass of smoke, through which gleams of fire were seen to shoot as they drew nearer, appeared the huge conical form of the mountain, whose dark bulk still rose nearly seven thousand feet above the sea that covered the great, beautiful, and historic island beneath it.

They had got within about twenty miles of the base of the mountains, when a shout was heard by those on the bridge, and Cosmo and the captain, looking for its source, saw the Jules Verne, risen to the surface, a little to starboard, and de Beauchamps excitedly signaling to them. They just made out the words, "Sheer off!" when the Ark, with a groaning sound, took ground, and they were almost precipitated over the rail of the bridge.

"Aground again, by—?" exclaimed Captain Arnes, instantly signaling all astern. "I told you not to go fooling round a volcano."

"This beats me!" cried Cosmo Verne. "I wonder if the island has begun to rise."

"More likely the sea has begun to fall," growled Captain Arnes.

"Do you know where we are?" asked Cosmo.

"We can't be anywhere but on the top of Monte Laura," replied the captain.

"But that's only three thousand feet high."

"It's exactly three thousand two hundred and thirty feet," said the captain. "I haven't navigated the old Mediterranean a hundred times for nothing."

"But even then we should have near seven hundred and fifty feet to spare, allowing for the draft of the Ark, and a slight subsidence of the water."

"Well, you haven't allowed enough, that's plain," said the captain.

"But it's impossible that the flood can have subsided more than seven hundred feet already."

"I don't care how impossible it is—here we are!

We're stuck on a mountain-top, and if we don't leave our bones on it I'm a porpoise."

By this time the *Jules Verne* was alongside, and de Beauchamps shouted up:

"I was running twenty feet under water, keeping along with the Ark, when my light suddenly revealed the mountain ahead. I hurried up and tried to warn you, but it was too late."

"Can't you go down and see where we're fast?" asked Cosmo.

"Certainly; that's just what I was about to propose," replied the Frenchman, and immediately the submersible disappeared.

After a long time, during which Cosmo succeeded in allaying the fears of his passengers, the submersible reappeared, and de Beauchamps made his report. He said that the Ark was fast near the bow on a bed of shelly limestone.

He thought that by using the utmost force of the *Jules Verne*, whose engines were very powerful, in pushing the Ark, combined with the backing of her own engines, she might be got off.

"Hurry up, then, and get to work," cried Captain Arms. "This flood is on the ebb, and a few hours more will find us stuck here like a ray with his jaw in a whale's back."

De Beauchamps's plan was immediately adopted. The *Jules Verne* descended, and pushed with all her force, while the engines of the Ark were reversed, and within fifteen minutes they were once more afloat.

Without waiting for a suggestion from Cosmo Verall, the Frenchman carefully inspected with his search-light the bottom of the Ark where she had struck, and when he came to the surface he was able to report that no serious damage had resulted.

"There's no hole," he said, "only a slight denting of one of the plates, which will not amount to anything."

Cosmo, however, was not content until he had made a careful inspection by opening some of the manholes in the inner skin of the vessel. He found no cause for anxiety, and in an hour the Ark resumed its voyage eastward, passing over the site of ancient Syracuse.

By this time a change of the wind had sent the smoke from Etna in their direction, and now it lay thick upon the water, and rendered it, for a while, impossible to see twenty fathoms from the bridge.

"It's old Etna's dying salute," said Cosmo. "He won't have his head above water much longer."

"But the flood is going down," exclaimed Captain Arms.

"Yes, and that puzzles me. There must have been an enormous absorption of water into the interior, far greater than I ever imagined possible. But wait until the nucleus of the nebula strikes us! In the mean time, this lowering of the water renders it necessary for us to make haste, or we may not get over the mountains round Suez before the downpour recommences."

As soon as they escaped from the smoke of Etna they ran full speed ahead again, and, keeping well south of Crete, at length, one morning they found

themselves in the latitude and longitude of Alexandria.

The weather was still superb, and Cosmo was very desirous of getting a line on the present height of the water. He thought that he could make a fair estimate of this from the known height of the mountains about Sinai. Accordingly they steered in that direction, and on the way passed directly over the site of Gahra.

Then the thought of the pyramids came to them all, and de Beauchamps, who had come aboard the Ark, and who was always moved by sentimental considerations, proposed that they should spend a few hours here, while he descended to inspect the condition in which the flood had left these mighty monuments.

Cosmo not only consented to this, but he even offered to be a member of the party. The Frenchman was only too glad to have his company. Cosmo Verall descended into the submersible after instructing Captain Arms to hover in the neighborhood.

The passengers and crew of the Ark, with expressions of anxiety that would have pleased their subject if he had heard them, watched the *Jules Verne* disappear into the depths beneath.

The submersible was gone so long that the anxiety of those aboard the Ark deepened into alarm, and finally became almost panic. They had never before known how much they depended upon Cosmo Verall.

He was their only reliance, their only hope. He alone had known how to keep up their spirits, and when he had assured them, as he so often did, that the flooding would surely recommence, they had hardly been terrified because of their unexpressed confidence that, let come what would, his great brain would find a way out for them.

Now he was gone, down into the depths of this awful sea, where their imaginations pictured a thousand unnumbered perils, and perhaps they would never see him again! Without him they knew themselves to be helpless. Even Captain Arms almost lost his nerve.

The strong good sense of Amos Blank alone saved them from the utter despair that began to seize them an hour after hour passed without the reappearance of the *Jules Verne*.

His experience had taught him how to keep a level head in an emergency, and how to control panics. With King Richard always at his side, he went about among the passengers and fairly laughed them out of their fears.

Without discussing the matter at all, he convinced them, by simple force of his own apparent confidence, that they were worrying themselves about nothing.

He was, in fact, as much alarmed as any of the others, but he never showed it. He started a rumor, after six hours had elapsed, that Cosmo himself had said that they would probably require ten or twelve hours for their exploration.

Cosmo had said nothing of the kind, but Blank's prevarication had its intended effect, and, fortunately, before the lapse of another six hours, there was news from under the sea.

And what was happening in the mysterious depths below the Ark? What had so long detained the submersible?

The point where the descent was made had been so well chosen that the *Jules Verne* almost struck the apex of the Great Pyramid as it approached the bottom. The water was somewhat muddy from the sands of the desert, and the search-light streamed through a yellowish medium, recalling the "golden atmosphere" for which Egypt had been celebrated. But, nevertheless, the light was so powerful that they could see distinctly at a distance of several rods.

The pyramid appeared to have been but little injured, although the tremendous tidal wave that had swept up the Nile during the invasion of the sea before the downpour began had scraped out the sand down to the bed-rock on all sides.

Finding nothing of particular interest in a circuit of the pyramid, they turned in the direction of the Great Sphinx.

This, too, had been excavated to its base, and it now stood up to its full height, and a terrible expression seemed to have come into its enigmatic features.

Cosmo wished to get a close look at it, and they ran the submersible into actual contact with the forepart of the gigantic statue, just under the mighty chin.

While they paused there, gazing out of the front window of the vessel, a humming sound was heard, followed by a loud crash, and the *Jules Verne* was shaken from stem to stern. Every man of them threw himself against the sides of the vessel, for the sound came from overhead, and they had an instinctive notion that the roof was being crushed down upon them.

A second resounding crash was heard, shaking them like an earthquake, and the little vessel rolled partly over upon its side.

"We are lost!" cried de Beauchamps. "The Sphinx is falling upon us! We shall be buried alive here!"

A third crash came over their heads, and the submersible seemed to sink beneath them as if seeking to avoid the fearful blows that were rained upon its roof.

Still, the stout curved ceiling, strongly braced within, did not yield, although they saw, with affright, that it was bulged inward, and some of the braces were torn from their places. But no water came in.

Stunned by the suddenness of the accident, for a few moments they did nothing but cling to such supports as were within their reach, expecting that another blow would either force the vessel completely over or break the roof in.

But complete silence now reigned, and the missiles from above ceased to strike the submersible. The search-light continued to beam out of the fore end of the vessel, and following its broad ray with their eyes, they uttered one cry of mingled amazement and fear, and then stared without a word at such a spectacle as the wildest imagination could not have pictured.

The front of the Sphinx had disappeared, and the

light, penetrating beyond the place where it had stood, streamed upon the face and breast of an enormous black figure, seated on a kind of throne, and staring into their faces with flaming eyes which at once fascinated and terrified them.

To their startled imaginations the eyes seemed to roll in their sockets, and flashes of fire to dart from them. Their expression was menacing and terrifying beyond belief. At the same time the aspect of the face was so majestic that they covered before it.

The cheek bones were high and massive and polished until they shone in the light; the nose and chin were powerful in their contours; and the brow wore an intimidating frown. It seemed to the awed onlookers as if they had carelessly burst into the sanctuary of an offended god.

But, after a minute or two of stupefaction, they thought again of the desperateness of their situation, and turned from staring at the strange idol to consider what they should do.

The fact that no water was finding its way into the submersible somewhat reassured them, but the question now arose whether it could be withdrawn from its position.

They had no doubt that the front of the Sphinx, saturated by the water after the thousands of years that it had stood there, exposed to the seducing influence of the sun and the desert sands, had suddenly disintegrated, and fallen upon them, pinning their vessel fast under the fragments of its huge chin.

De Beauchamps tried the engines and found that they had no effect in moving the *Jules Verne*. He tried again and again to disengage the vessel, by reversing but it would not stir. Then they debated the only other means of escape.

"Although I have levium life-suits," said the Frenchman, "and although the tap can probably be opened, for the door seems not to have been touched, yet the instant it is removed the water will rush in, and it will be impossible to pump out the vessel."

"Are your life-suits so arranged that they will permit of moving the limbs?" demanded Cosmo.

"Certainly they are."

"And can they be weighted so as to remain at the bottom?"

"They are arranged for that," responded de Beauchamps.

"And can the weights be detached from within by the farmer without permitting the entrance of water?"

"It can be done, although a very little water might enter during the operation."

"Then," said Cosmo, "let us put on the suits, open the door, take out the ballast as that, if released, the submersible will rise to the surface through its own buoyancy, and then see if we cannot loosen the vessel from outside."

It was a suggestion whose boldness made even the owner and constructor of the *Jules Verne* stare for a moment, but evidently it was the only possible way in which the vessel might be saved; and knowing that, in case of failure, they could themselves float to the surface after removing the weights from the bottom of the suits, they unanimously decided

to try Cosmo Verall's plan. It was terribly hard work getting the hallet out of the submersible, working as they had to do under water, which rushed in as soon as the door was opened, and in their awkward suits, which were provided with apparatus for renewing the supply of oxygen; but at last they succeeded.

Then they clambered outside, and labored desperately to release the vessel from the huge fragments of stone that pinned it down. Finally, exhausted by their efforts, and unable to make any impression, they gave up.

De Beauchamps approached Cosmo, and mentioned to him that it was time to ascend to the surface and leave the *Jules Verne* to her fate. But Cosmo signaled back that he wished first to examine more closely the strange statue that was gazing upon them in the still unextinguished beam of the search-light with what they might now have regarded as a look of mockery.

The others, accordingly, waited while Cosmo Verall, greatly impeded by his extraordinary garment, clambered up to the front of the figure. There he saw something which refreshed his amazement.

On the broad breast he saw a representation of a world overwhelmed with a deluge, and encircling it was what he instantly concluded to be the picture of a nebula. Underneath, in ancient Egyptian hieroglyphics, with which Cosmo was familiar, was an inscription in letters of gold, which could only be translated thus:

I Come Again—

At the End of Time.

"Great Heavens!" he said to himself. "It is a prophecy of the Second Deluge!"

He continued to gaze, amazed, at the figure and the inscription, until de Beauchamps clambered to his side and indicated to him that it was necessary that they should ascend without further delay, showing him by signs that the air-renewing apparatus would give out.

With a last lingering look at the figure, Cosmo imitated the others by detaching the weights from below his feet, and a minute later they were all shooting rapidly toward the surface of the sea, de Beauchamps, as he afterward declared, uttering a prayer for the repose of the *Jules Verne*.

The imaginary time which Amos Blank had fixed as the limit set by Cosmo for the return from the depths was nearly gone, and he was beginning to cut about for some other invention to quiet the rising fears of the passengers, when it came in a visible form, which made the eyes of Captain Arnes, the first to catch sight of it, start from their sockets. He rubbed them, and looked again—but there it was!

A huge head, human in outline, with bulging, glassy eyes, popped suddenly out of the depths, followed by the upper part of a gigantic form which was no less suggestive of a monstrous man, and which immediately began to wave its arms!

Before the captain could collect his senses another shot to the surface, and then another and another, until there were seven of them floating and awkwardly gesticulating within a radius of a hundred fathoms on the starboard side of the vessel.

The whole series of apparitions did not occupy more than a quarter of a minute in making their appearance.

By the time the last had sprung into sight Captain Arnes had recovered his wits, and he shouted an order to lower a boat, at the same time running down from the bridge to superintend the operation. Many of the crew and passengers had in the mean time seen the strange objects, and they were thrown into a state of uncontrollable excitement.

"It's them!" shouted the captain over his shoulder, in response to a hundred inquiries all put at once, and forgetting his grammar in the excitement. "They've come up in diving-suits."

Amos Blank comprehended the situation at once; and while the captain was attending to getting out the boat, he explained matters to the crowd.

"The submersible must be lost," he said quietly, "but the men have escaped, so there is no great harm done. It does great credit to that Frenchman that he should have been prepared for such an emergency. Those are leviathan suits, and I've no doubt that he has got hydrogen somewhere inside to increase their buoyancy."

Within a quarter of an hour all the seven had been picked up by the boat, and returned to the *Ark*. The strange forms were lifted aboard with tackle to save time; and as the first one reached the deck, it staggered about on its big limbs for a moment.

Then the metallic head opened, and the features of de Beauchamps were revealed within.

Before anybody could assist him he had freed himself from the suit, and immediately began to aid the others. In ten minutes they all stood safe and sound before the astonished eyes of the spectators. Cosmo had suffered the most from the confinement, and he sank upon a seat, but de Beauchamps seemed to be the most affected. With downcast look he said, sadly shaking his head:

"The poor *Jules Verne*! I shall never see her again."

"What has happened?" demanded Captain Arnes.

"It was the Father of Horror," muttered Cosmo Verall.

"The Father of Horror—what's that?"

"Why, the Great Sphinx," returned Cosmo, gradually recovering his breath. "Didn't you know that that was what the *Arks* always called the Sphinx?"

"It was that which fell upon the submersible—split right open and dropped its great chin upon us as we were sailing round it, and pinned us fast. But the sight that we saw when the Sphinx fell apart! Tell them de Beauchamps."

The Frenchman took up the narrative, while, with breathless attention, passengers and crew crowded about to listen to his tale.

"When we got to the bottom," he said "we first inspected the Great Pyramid, going all round it with our search-light. It was in good condition, although the tide that had come up the Nile with the invasion of the sea had washed away the sands to a great depth all about. When we had completed the circuit of the pyramid, we saw the Sphinx, which had been excavated by the water as that it stood up to its full height,

"We run close around it, and when we were under the chin the whole thing, saturated by the water, which no doubt caused an expansion within—you know how many thousand years the gigantic idol had been desiccated by the sun and the desert winds—dropped apart.

"The submersible was caught by the falling mass, and partly crushed. We labored for hours and hours to release the vessel, but there was little that we could do. It almost broke my heart to think of leaving the *Jafar Vernal* there, but it had to be done.

"At last we put on the levium floating-suits, opened the cover at the top, and came to the surface. The last thing I saw was the search-light, still burning, and illuminating the most marvelous spectacle that human eyes ever gazed upon."

"Oh, what was it? What was it?" demanded a score of voices in chorus.

"It is impossible to describe it. It was the secret of old Egypt revealed at last—at the end of the world!"

"But what was it like?"

"Like a glimpse into the remotest corridors of time," interposed Cosmo Vernal, with a curious look in his eyes.

"Some of you may have heard that long ago holes were driven through the Sphinx in the hope of discovering something hidden inside, but they missed the secret. The old god kept it well until his form fell apart. We were pinned so close to it that we could not help seeing it, even in the excitement of our situation.

"It had always been supposed that the Sphinx

was the symbol of something—it was, and more than a symbol! The explorers away back in the nineteenth century who thought that they had found something mysterious in the Great Pyramid went wide of the mark when they neglected the Sphinx."

"But what did you see?"

"We saw the prophecy of the *Second Deluge*," said Cosmo, rising to his feet, his piercing eyes aflame. "In the heart of the huge mass, approachable, no doubt, by some concealed passage in the rock beneath, known only to the priests, stood a gigantic idol, carved out of black marble.

"It had enormous eyes of some gem that blazed in the electric beam from the search-light, with huge golden ears and beard, and on its breast was a representation of a drowning world, with a great achela sweeping over it."

"It might have been a history instead of a prophecy," suggested one of the listening sevens. "Perhaps it only told what had once happened."

"No," replied Cosmo, shaking his big head. "It was a prophecy. Under it, in ancient Egyptian hieroglyphics, which I recognized, was an inscription which could only be translated by the words, 'I come again—at the end of time!'"

There was a quality in Cosmo Vernal's voice which made the hearers shudder with horror.

"Yes," he added. "It comes again! The prophecy was hidden, but science had its means of revelation, too, if the world would, but have listened to its voice. Even without the prophecy I have saved the flower of mankind."

(To be concluded next month)

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# The Red Dust

By MURRAY LEINSTER

(Concluded)

that what Bari said was true, as they had already known.

Then, while the pink-skinned men feasted on the meat Bari had provided for them, he and Sava went toward the burrow he had made ready. It was not like the other burrows, being set apart from them, and its entrance was bordered on either side by mushrooms as black as night. All about the entrance the black mushrooms clustered, a strange species that grew large and scattered its spores abroad and then of its own accord melted into an inkly liquid that flowed away, sinking slowly into the ground.

In a little hollow below the opening of the burrow an inkly pool had gathered, which reflected the gray clouds above and the shapes of the mushrooms that overhung its edges.

Bari and Sava made their way toward the burrow in silence, a picturesque couple against the black background of the subtle mushrooms and the earth made dark by the inkly liquid. Both of their figures were swathed in cloaks of unsmirched whiteness and wondrous softness, and bound to Bari's forehead were the feathery, insectlike antennae of a great moth, making flowing plumes of parent gold. His spear

seemed cast from bronze, and he was a proud figure as he led Sava past the black pool and to the doorway of their home.

They sat there, watching, while the darkness came on and the moths and fireflies emerged to dance in the night, and listened when the rain began its slow, deliberate dripping from the heavy clouds above. Presently a gentle rumbling began—the accumulation of the rain from all the mountain-side forming a torrent that would pour in a six-hundred-foot drop to the river far below.

The sound of the rushing water grew louder, and was echoed back from the cliffs on the other side of the valley. The fireflies danced like fairy lights in the chasm, and all the creatures of the night winged their way aloft to join in the ecstasy of life and love.

And then, when darkness was complete, and only the fitful gleams of the huge fireflies were reflected from the still surface of the black pool beneath their feet, Bari reached out his hand to Sava, sitting beside him in the darkness. She plucked shyly, and her soft, warm hand found his in the obscurity. And Bari bent over and kissed her on the lips.

THE END

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# THE MAN WHO COULD VANISH

By A. HYATT VERRILL

(Concluded)

him a ten dollar bill, he grinned knowingly, threw in the gears and with hoody hooking horn headed uptown as I had directed.

Hastily bandaging Lemuel's face with my handkerchief to prevent any further complications arising over blood dripping on the taxi seat or floor, and half-supporting him, for he was still dazed and groggy and without his glasses was almost as blind as a bat, I feared him with my hat.

Presently he showed signs of recovering, took several deep breaths of relief and ruefully felt of his various bumps, contusions and bruises. Then, with a groan, he remarked: "Whew, that fellow packed an awful punch!"

"Yes," I agreed, "and obviously the fact that you are invisible does not prevent you from getting hurt."

"Nor from suffering," mumbled my companion, "I'm positive my jaw is fractured."

"Don't try to talk," I said. "I'd take you to a hospital or a doctor's office, but you'd have to be visible and you're in no fit shape to materialize in public. You look like a butchery."

By the time we reached my apartments Lemuel was near a collapse and was, I knew, suffering intensely. But he was still game, and with but little assistance walked up the steps and into my rooms where he instantly dropped upon a couch.

"Now, if you're able to, and the confounded thing isn't out of order, get back to your normal state," I commanded him. "I'll have my doctor here in a moment, but you've got to be visible first."

I was greatly worried for fear that Lemuel might faint or lose consciousness before he could restore himself to visibility, and I was so perturbed and excited that it never occurred to me that, even if he remained invisible, I could give the glasses to the physician and thus enable him to attend to my friend's injuries. However, to my relief, Lemuel fumbled with his mechanism, and presently was once more visible to unaided human eyes. And not an instant too soon. He had exhausted his last strength in operating the device which dropped to the floor as consciousness left him.

Fortunately, my doctor lived less than a block distant, and, still more fortunately, he was in his office. Within five minutes he was bending over Dr. Unshin, and, being as all doctors should be, a most discreet man, he forbore to make embarrassing inquiries as to the manner in which Lemuel had received the wounds.

To my intense relief he assured me that there was no fracture and no injuries more serious than the one deep gash and severe contusions.

Lemuel regained consciousness as the doctor was

bandaging the wound, but he made no attempt to speak, and, for that matter, his face was too swollen and painful to permit him to utter an intelligible word for the next twenty-four hours.

In the meantime we eagerly bought and read the papers which were filled with accounts of the Hartwell Building mystery, and I could see by Lemuel's expression, even through his bandages, that he was immensely pleased at the attention his feat had attracted. There were also items regarding cur, or rather Lemuel's, other exploits. A score of persons had reported the incident of the fainting woman; the man in the subway station had related his experience, but not a word appeared in print regarding the sudden vanishing of the car. No doubt the guard hesitated to mention or report the matter fearing that his superiors might, quite reasonably, feel that a guard subject to such hallucinations was unfit for his position. And, in all probability, the passengers who had been present and who, the chances were, had spoken to the guard after our departure, were convinced that they had been subjected to some optical illusion.

And of course there was no reference to the thief chase or Lemuel's injuries, for the thief alone had seen anything out of the ordinary.

And of course no one had suspected our connection with all the phenomena, for which I was extremely thankful, although it did not please Lemuel, who declared, somewhat peevishly that he had received no credit for his astounding discovery.

"Credit?" I exclaimed, "If the police knew you were at the bottom of these things you'd very probably be in jail by now."

"And," I continued, "I hope this last experience of yours has convinced you that I was right and that your discovery is a menace. If you take my advice you'll destroy every one of your formulas and every confounded contraption that has to do with the invention."

A very grin twisted Dr. Unshin's plastered and bandaged face. "No," he declared, "I shall destroy nothing. But I must admit that I have found my discovery is not so beneficial to the individual or the public at large as I had hoped. It is, I fear, too vast in its possibilities to be given to the world as I had planned. But I still am positive that it is a most important discovery and, if properly employed, will be of incalculable benefit to the world. No, instead of destroying it as you suggest, I shall present it to our government on the understanding that it shall remain a secret until needed to avert some national calamity."

I breathed a sigh of deep relief. "In that case," I replied, "your invention is as good as destroyed."

THE END

# The Man With the Strange Head

By Dr. MILES J. BREUER

(Continued)

been in prison for two years; just last week he was released——"

Chief Peter John Smith interrupted.

"I've been putting two and two together, and I can shed a little light on this problem. Three days ago, the day before I was called to watch Anstruther pacing his room, we picked up this man Petula in the alleyway between Ridge & Cuneen's and Miller & Palmer's. He was unconscious, and must have received a terrible licking at somebody's hands; his face was almost unrecognizable; several ribs and several fingers on his right hand were broken. He clutched a pistol fitted with a silencer, and we found that two shots had been fired from it. Here he is——"

A limp, handgaged, plastered man was pushed in between two policemen. He was sullen and apathetic, until he caught sight of Anstruther's face from which the chief had drawn a corner of the sheet. Terror and joy seemed to mingle in his face and in his voice. He raised his handgaged hand with an ineffectual gesture, and started off on some Greek religious expression, and then turned dazedly to us, sparring painfully through his swollen face.

"Glad he dead. I try to kill him. Shoot him two time. No kill. So close——" indicating the distance of a foot from his chest; "then he lick me. He is not man. He is devil. I not kill him, but I glad he dead!"

The Chief hurried him out, and came in with a small, dapper man with a black chin whisker. He apologized to the coroner.

"This is not a frame-up. I am just following out a hunch that I got a few minutes ago while Storer was talking. This is Mr. Fournier. I found his address in Anstruther's room, and dug him up. I think he will be more important to you doctors than he will in a court. Tell 'em what you told me!"

While the little Frenchman talked, the undertaker's assistant jerked off the sheet. The undertaker's work had had its effect in getting rid of the frightful odor, and in making Anstruther's face presentable. The body, however, looked for all the world as though it were alive, plump, powerful, pink. In the chest, over the heart, were two bullet holes, not bloody, but clean-cut and black. The Frenchman turned to the body and worked on it with a little screw-driver as he talked.

"Mr. Anstruther came to me ten years ago, when I was a poor mechanic. He had heard of my automobile chess-player, and my famous animated show-window models; and he offered me time and money to find him a mechanical relief for his infirmity. I was an assistant at a Paris laboratory, where they had just learned to split radium and get a hundred horse-power from a pinch of powder. Anstruther was weak and thin, but ambitious."

The Frenchman lifted off two plates from the chest and abdomen of the body, and the flanks swung outward as though on hinges. He removed a number of packages that seemed to fit carefully within, and which were on the ends of cables and chains.

"Now——" he said to the assistants, who held the feet. He put his hands into the chest cavity, and as the assistants pulled the feet away, he lifted out of the shell a small, wrinkled, emaciated body; the body of an old man, which now looked quite in keeping with the well-known Anstruther head. His chest was covered with dried blood, and there were two bullet holes over the heart. The undertaker's assistants carried it away while we crowded around to inspect the mechanism within the arms and legs of the pink and live-looking shell, headless, gaping at the chest and abdomen, but uncannily like a healthy, powerful man.

THE END

## Discussions

### Dr. Moreau and the "Wolf Girls"

An Irish correspondent recently wrote in, asking me after discussion of "The Island of Dr. Moreau." He told us much that we can now incorporate into this. Incidentally it would take up too much space, but he will go to work, saying that the story was entirely impossible, that scientists could never turn two humans and humans certainly never from animals. He said many other unscientific things about the story in general.

In answer we sent a clipping which appeared in the *New York Times*, from an *Illustrated Press Dispatch*. As usual, truth is stranger than fiction.

The little "wolf girls" were found recently living in a wolf's den near an isolated village in England, British Isles. The story is told by The Westminster Gazette, which received it from John, recorded by the Rev. J. J. Smith of Manchester, Bristol, and Bishop

Polkington Bishop of Exeter, College, Oxford.

English English relates that about the year of 1800, while visiting the Rev. J. J. Smith's residence at Manchester, Mr. Smith mentioned how he discovered the "wolf girls."

As a certain part of his church was long before the rebellion, and in time a full story would develop it was known by the name. Investigation revealed a wolf den in which there were several wolf cubs and two girls, about two and eight years of age, both thoroughly fierce, running in all ways, always guarded their and being like wolves.

The explanation was that they were abandoned by their mother or mother and were found and adopted by the wolf. It was a most difficult, very regretful, but the younger girl was afterwards. The other child was found in one of the villages. She was gradually returned from

her savage ways, but she fought fiercely against entering clothes, and then she was given after they were given on her. She then she returned to be washed and she was kept in a den. Eventually, the two girls thought to see her family and see a few months.

She died at about midnight and another was also found, but in a wolf's den, not in a den, preferring the company of dogs to children.

The above story seems to have reached some discussion in London and several recent newspapers have written in the Westminster Gazette (the Rev. J. J. Smith's residence in London, and it seems that in West Africa studies are told of such children being raised by some large species of monkeys in the jungle. Dr. Spurgeon, English, analyzes on the possession of a child with a head of wolves and just produced some of his own pictures. (Continued on page 571)









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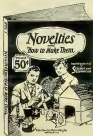
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